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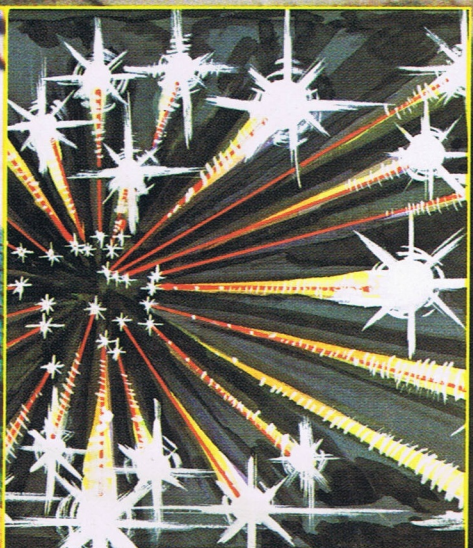
Number 26

**Is
Stop Motion
Dead?**

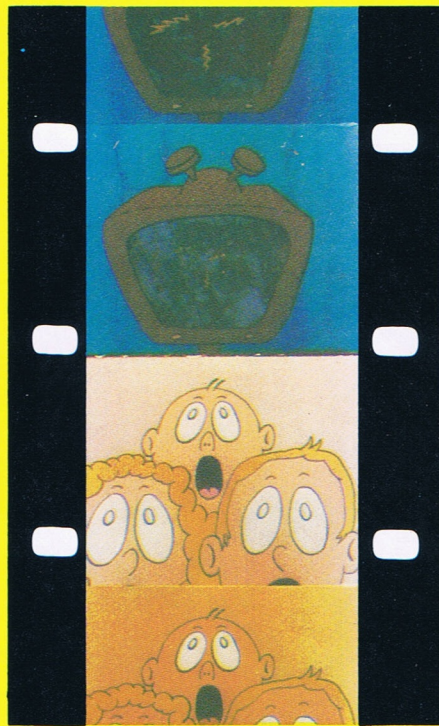
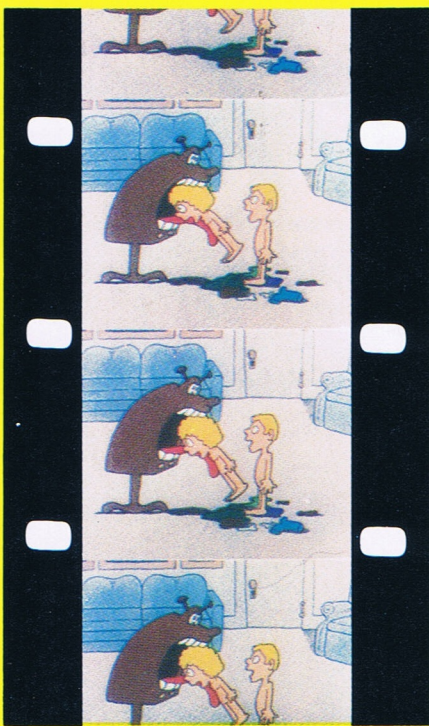


Electronic
Special Effects—
Unlocking
the Secret
of Time Lapse

A
Stop-Motion
Alternative—
Hand
Puppet
Monsters



The Star
Zoomer—
Warp
Speed
Effects for
Super-8



Top left and top middle: Two scenes from Mendel Marks' *Tummy Vision*, which tied for first place in the 1983 CINEMAGIC/SVA Short Film Search. See the On Location section on page 20. **Top right:** Edward Endres and Don Yates of South Bend, Indiana built two of these beautifully executed Imperial Biker Scout costumes. See the Filmmakers' Forum section on page 12.

Above: A production still from Center Cinema Enterprises' *I Know What You Need*. **Right:** A production still from Clint Young's *The Intruder*. See the Producers' Bulletin Board section on page 24.



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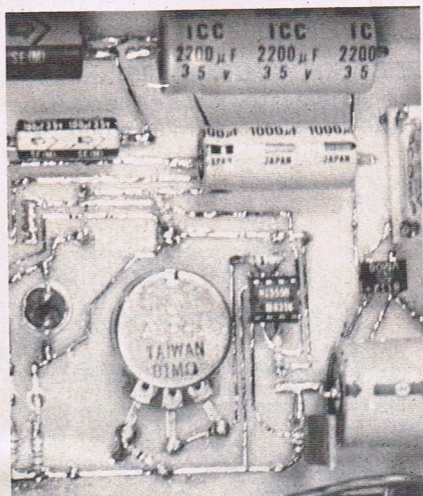


Hand puppets can be convenient alternatives to stop-motion animation. By Douglas Borton.

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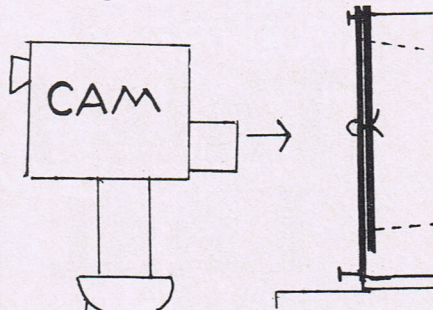
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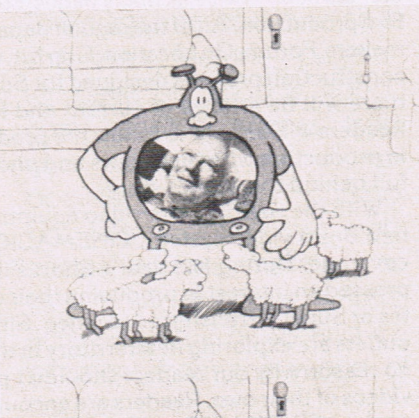
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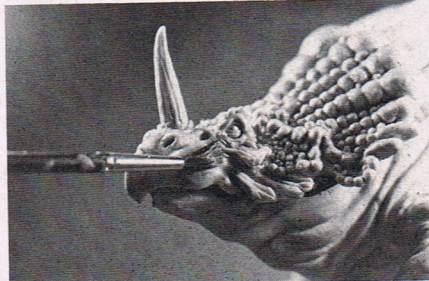
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About the Cover: The main cover photo shows Harry Walton, chief cameraman and animator at Gene Warren's Excelsior Moving Pictures studio, positioning a model dinosaur for the next frame in an action sequence for TV's *Land of the Lost*. See David Hutchison's article, "Is Stop Motion Dead?", on page 26. The photo on the bottom left shows Douglas Borton's hand puppet dinosaur. See Borton's article about hand puppets on page 6. The photo on the bottom right shows Jack Imes' "star zoomer" effect. See page 17. Main cover photo is courtesy of Gene Warren.

Editor's BENCH

This Is Your Last Issue!

No, CINEMAGIC is not closing up shop, but this *is* your last issue of this magazine in its present format. The next issue that you receive will have nearly twice as many pages, covering a much broader spectrum of fantasy film production. All of the regular departments—Producers' Bulletin Board, Filmmakers' Forum, On Location, Grip Kit, etc. will remain, but there will be many more construction projects designed for Super-8, 16mm and video users. In addition, there will be articles of current and historical interest to special effects buffs. Readers will be able to follow the production of special effects and fantasy films in production with interviews and photographs taken on location capturing the full behind-the-scenes story.

With the rise of home video equipment, MTV and the introduction of Kodak's new 8mm video system, CINEMAGIC intends to expand its video production coverage. During last year's Short Film Search, quite a number of readers expressed an interest in producing their own music videos—either on videocassettes or Super-8 transferred to video. Since the pro videos on MTV and other cable outlets are exploring new territory in the realms of imagination and fantasy, I see no reason why our readers shouldn't push back their own fantasy frontiers with videos of their own. Readers are encouraged to produce and submit tapes of their work to CINEMAGIC to be displayed in our new video section.

To support our expanded format, the magazine will have a higher cover price. New subscriptions and renewals will be priced accordingly. The new rates are posted in the ad on the facing page. Subscriptions and renewals will no longer be accepted at the old rate, but current subscribers will receive full credit for the term of their subscriptions. Renewal notices will be going out at the new rate effective with this issue.

* * * * *

New rules and entry forms for the next CINEMAGIC/SVA Short Film Search will be available by the end of June. There have been minor revisions in the rules, but the major requirements remain the same with the same maximum length of 15 minutes (preferably less).

Deadline for entries: October 1, 1984.

Awards Night Screening: November 12, 1984.

—David Hutchison

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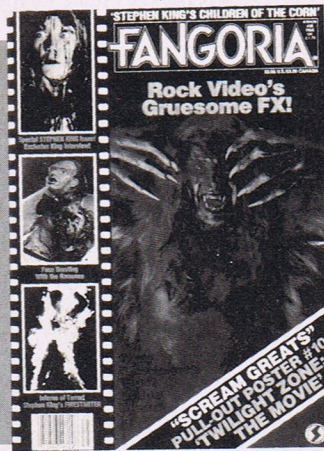


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Hand Puppet Monsters: A TIME-SAVING ALTERNATIVE TO STOP-MOTION

By DOUGLAS BORTON

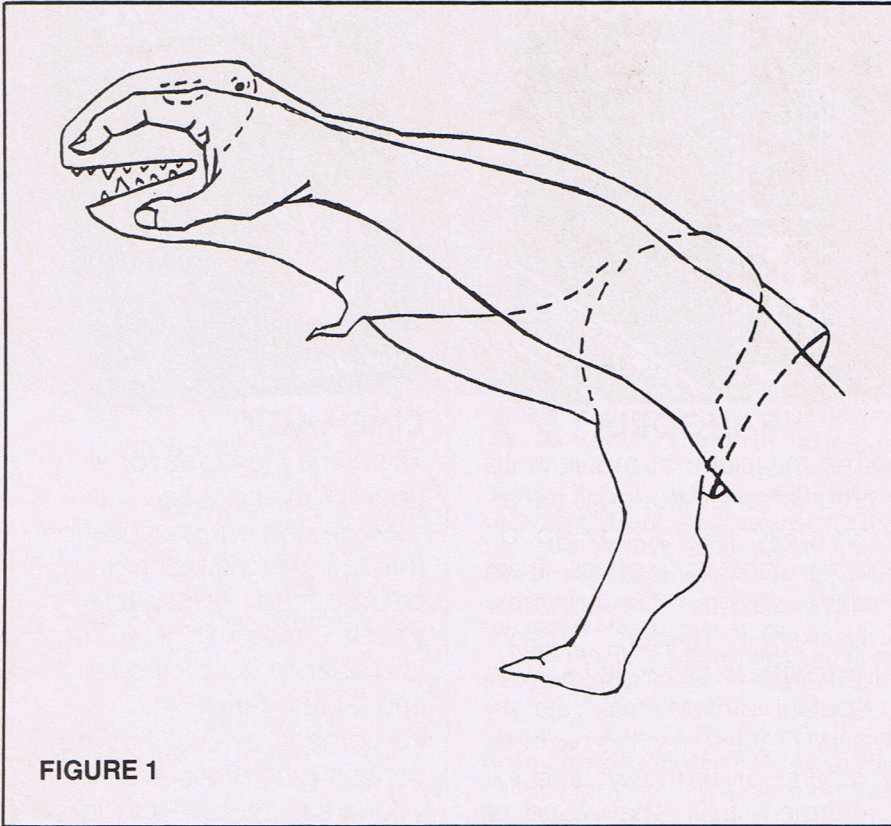
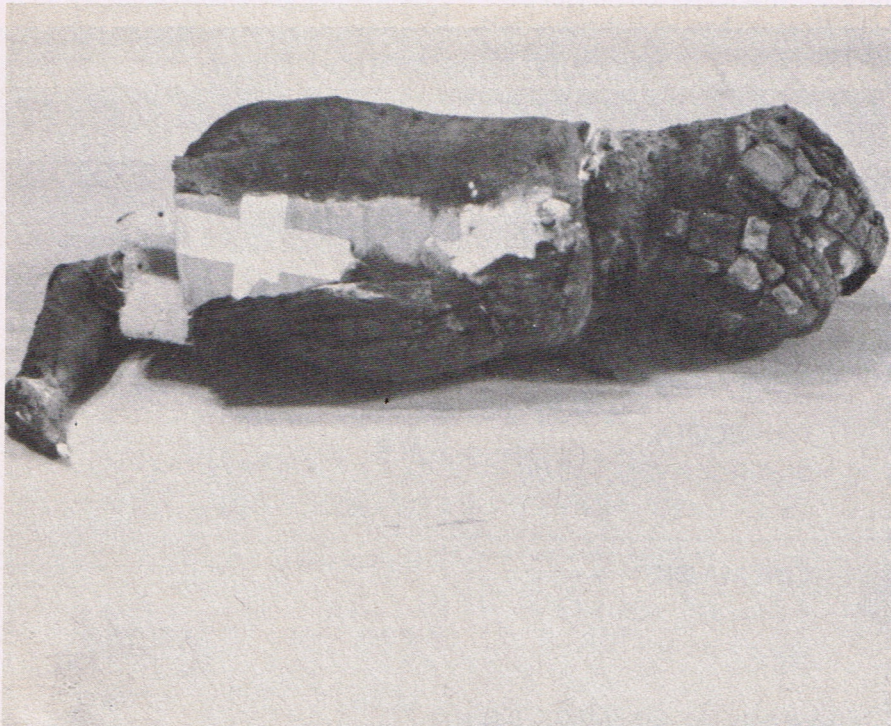


FIGURE 1

Design of the puppet. The animal's anatomy must be modified to accommodate the hand. Not all of one puppet must be designed or built.



The Hand puppet during construction. Skin detail was added via the "build-up" method.

Suppose you're planning a movie in which a person is chased through the woods by a dinosaur. You intend to include numerous closeups of the dinosaur roaring and snapping at its prey, as well as a few long shots showing the live actor and the monster together.

Your first thought might be to use stop-motion animation. But if you tried doing the sequence that way, you'd be in for quite a struggle. To show the dinosaur in the forest, you'd have to build either extensive miniature sets or a complete process projection system. To combine the monster and its victim in one shot, you'd need to project Super-8 or 16mm film onto your process screen or attempt some kind of matte shot; in either case, the heavy grain and poor registration of these film gauges would probably sabotage the results. The sheer amount of animation would mean weeks or months of tedious work in a cramped workspace under hot movie lights. Even building the dinosaur would be a major challenge, given the sophisticated metal armatures which high-quality animation models require.

All this does not mean that you should never use animation; on the contrary, there are some cases where only animation will work. But at other times, a simple, low-cost, time-saving alternative is possible: the hand puppet.

Unlike a stop-motion model, a hand puppet can be constructed and filmed in a matter of days, not weeks. And—while this may sound like heresy to animation fans—the results can be at least equally effective. Hand puppets move smoothly, without the strobing and jerkiness often seen in stop-motion. They also can be filmed outdoors, against real backgrounds. Using perspective photography, they can be combined directly with actors, producing a grainless, seamless illusion.

CREATING THE PUPPET

So far we have focused on the advantages of the hand puppet; when we begin to design and build one, a few disadvantages become apparent. For one thing, since the puppet will always have an arm sticking out of it while in use, it cannot be shown from certain angles or in extreme long shots. On the positive side, this means that you need not design or build the whole monster, only the part which the camera will see.

Another disadvantage is that in designing the monster, you may have to modify its anatomy to accommodate your hand. In the case of fantasy creatures, this is usually not a problem; but for dinosaurs



The finished puppet, ready for filming.

or other real-life monsters it can mean departing from textbook accuracy (see figure 1).

The simplicity and ease of building a hand puppet helps to compensate for some of its limitations. The puppet begins with a glove (or a sock cut to fit like a glove). Cut, fold and tape together thin pieces of cardboard to make the skull, jaw and major body parts; then "sew" these cardboard pieces to the glove with needle and thread. Hinge the jaw loosely to the skull. Construct legs out of metal mending plates bolted together so as to swing freely. If you wish, you may attach wooden or wire rods to the legs, which can then be manipulated from below (see figure 2).

Cut eye sockets in the cardboard skull and insert glass eyes (available from suppliers of doll parts) or beads painted to resemble eyes. You can either mold the teeth out of liquid latex or model them out of a material such as caulk which hardens without chipping. Glue the teeth to the jaw and skull with latex, then dab on a mixture of latex, water and red acrylic paint to create the gums.

Next, wrap the cardboard pieces in tissue and coat them with uncolored latex, until you have established the basic shape

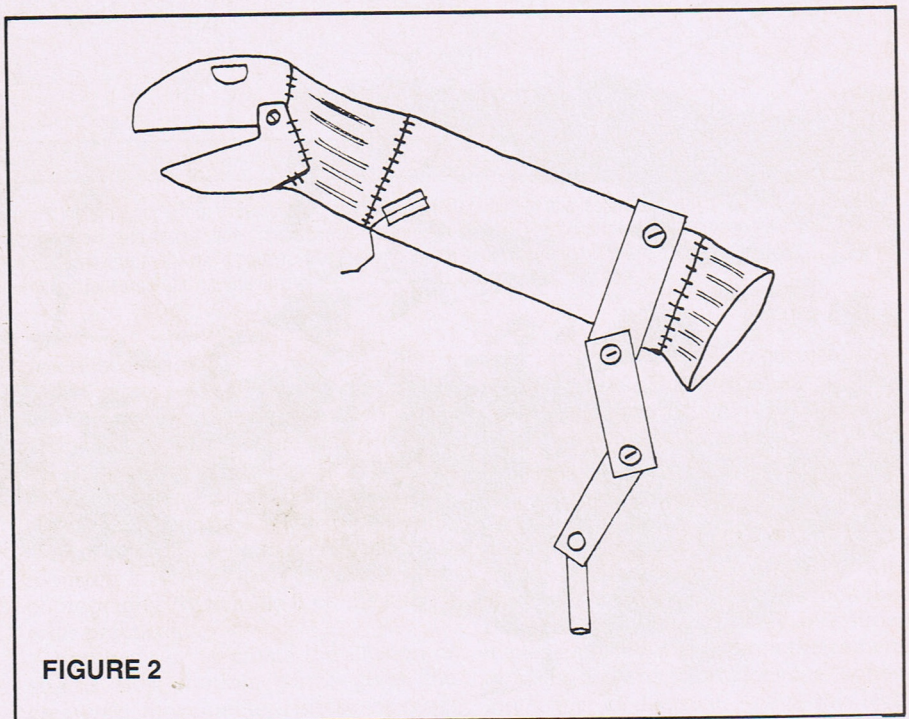


FIGURE 2

Construction of the puppet. The skull, jaw and body are cardboard, "sewed" to the glove or sock. The jaw is hinged loosely to the skull. The tiny forearms are stiff wire taped to the body. Legs are mending plates which swing freely and may be controlled from below by a concealed rod.



FIGURE 3

Storyboarding the action. Through perspective cinematography, the puppet can appear in the foreground (the first panel), the midground (third panel), or even the background of the shot (fourth panel). It may be shown against no background (second panel) or with a miniature foreground set (fifth panel).

of the monster. Skin detail can be molded in liquid latex sheets and glued in place with latex; or it can be built up directly. The second method is easier and faster. Mix latex, water and acrylic paint of the desired skin color; soak bits of tissue in the mixture and apply them, while wet, to the puppet. Shape each piece with a sculpting tool (or with a pencil, or your fingernail) until it resembles a wart, scale or wrinkled fold of flesh. Do the same with the next piece and the next, adding more details and features to the puppet, section by section. You can also lay down a large, moist piece of tissue and carve lines, patterns and textures into it with a knife or needle. Bumps are created by letting the latex mixture dry partially to a thick, lumpy consistency, then dabbing lumps of latex onto the model with a pencil.

Throughout the process of building the puppet, it is important to keep your hand in—literally. Test the puppet periodically

to make sure that it remains flexible. As the latex dries, it contracts and stiffens slightly, and this will inevitably constrict the puppet's movement somewhat. If a crucial part of the puppet, such as the jaw or neck, becomes hard to move, you'll have to tear off the latex and rebuild that section. Your goal is a puppet which will be comfortable to work with and realistic on screen.

FILMING THE PUPPET

As with all special effects, scenes involving hand puppets require careful preparation. Draw storyboards illustrating all the different effects shots and indicating clearly how each will be accomplished. At first, the range of actions possible to a simple hand puppet may seem limited when compared to that of a stop-motion figure; but if you accept these limitations as a challenge and think creatively of ways to overcome them, you

may be surprised by the variety of movements and camera angles which are possible. The ease of filming hand puppets also allows you to shoot extra footage for editing purposes and to experiment freely with shots which may or may not succeed (see figure 3).

As a general rule when using hand puppets, quick cuts and simple actions are best. Complicated movements should be broken down into separate shots and cut together. If you want to show a part of the monster which you could not incorporate into the basic design, such as its tail, build and shoot that part separately and combine it with the hand puppet via editing (see figure 4). For added realism, apply vaseline, glycerine or fake blood to the puppet immediately before filming; the monster will appear to be slimy, drooling or bleeding.

In many cases low lighting can help to further conceal the puppet's limitations



Long shot of the puppet. Note that the dinosaur fits seamlessly into its surroundings, with no contrast, fringing or registration problems.



A medium shot of the puppet. Perspective cinematography helps to make the puppet appear larger than it is. If there were an actor in the far background the puppet could be used as a foreground miniature and would appear huge in comparison. Hand puppet monsters can provide an easy, time saving alternative to stop-motion animation. The tail section was not built. Editing is very important in puppet photography.

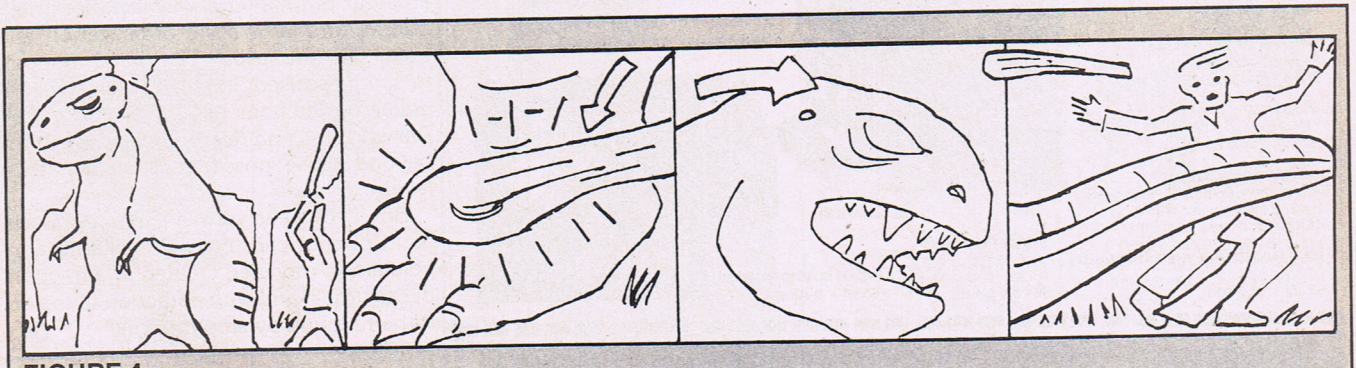


FIGURE 4

Breaking down the action. In this sequence, the actor whacks the dinosaur's foot with a club; the dinosaur whirls, roaring, and lashes out with its tail, knocking the actor down. Such an action, too complex for the hand puppet to execute in one shot, can be simulated through editing. The second and fourth panels illustrate the use of specialized props (the foot and tail) built and filmed separately from the main puppet. The first and fourth panels are further examples of perspective cinematography; the effects of the tail striking the actor requires rehearsal and careful timing.

and enhance its realism; but when the puppet is to be shown against real backgrounds or towering over real actors, low lighting is not practical. Such "perspective" shots work by fooling the camera's two-dimensional eye; the tiny puppet, placed close to the lens, appears larger than the actors in the distance. But this technique depends on keeping both the puppet and the actors—or foreground and background—in focus. And the more light, the greater the "depth-of-field"; because you can use a smaller f-stop and thus keep more of the scene in focus. So effects shots of this kind are best executed outdoors on a sunny day, in a bright, open location such as a field, a beach, or the

desert (see figure 5).

Two other rules of thumb make perspective shots easier to accomplish. First: wide-angle lenses have greater "depth-of-field" than telephoto lenses, so if your camera has a zoom lens, keep it as wide as possible. Second: the larger the puppet, the easier it is to keep in focus, so if your monster is to be used in perspective photography, try to build it on the largest scale practical.

Another way to create the illusion of size is slow motion, which gives the creature's movements a sense of mass and weight. Because slow-motion shooting reduces the amount of light reaching the film and so cuts down on "depth-of-

field," it is not always practical for perspective shots. But if you are shooting your puppet on a miniature set or against an out-of-focus background, overcranking at, say, 48 frames per second may be a good idea. In such circumstances you may also wish to shoot through a very subtle diffusion filter or a sheet of glass lightly smeared with vaseline. Very often miniatures look fake because it is obvious that they were filmed in closeup a few inches from the camera; diffusing the image provides the "softening" effect of distance. Again, this technique is difficult to apply outdoors, where the background of the shot really is distant to begin with.

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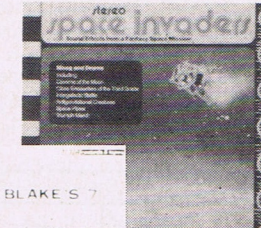
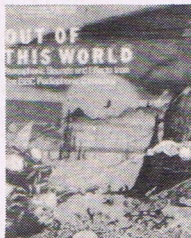
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Closeup of the puppet, photographed outdoors against the unusual Vasquez Rocks, about 30 miles outside of Los Angeles.

Perhaps the most important thing to remember in using hand puppets—or in attempting any kind of special effects—is that *less is more*. Even the simplest effects shots pose pitfalls for the filmmaker; to plan sequences that are unnecessarily complex or unrealistically ambitious is to invite disaster. This is particularly true of amateur filmmakers, who lack the time, budget and large-scale organization enjoyed by the pros. The hand puppet techniques used in such multi-million dollar productions as *Dragonslayer*, *The Dark Crystal*, and *Return of the Jedi* go far beyond those possible at the amateur level.

But if you keep your effects simple, the hand puppet can make an exciting and persuasive monster, created in a fraction of the time—and with a fraction of the effort—required by stop-motion. **CM**

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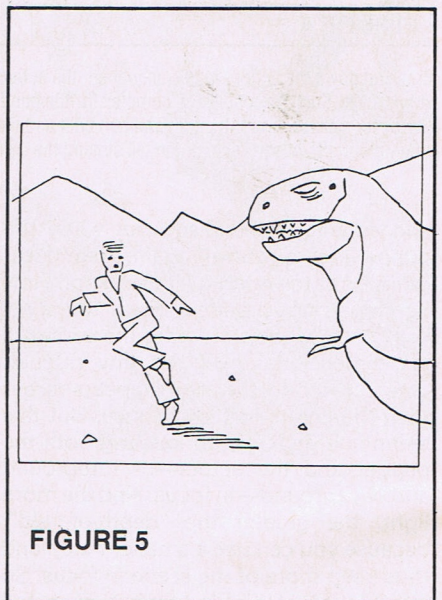


FIGURE 5

Perspective photography. The puppet, held close to the lens, appears huge in comparison with the more distant background.

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#8—Video Tape Transfers; Reverse Filming Effects; Lab Services; Clash of the Titans Preview; Profile—Paul Vitous and Mike Antonucci.



#9—Animating Pogo; Lithographic Film Titles; Sets on a Shoestring; Profile—The Langley Punks.



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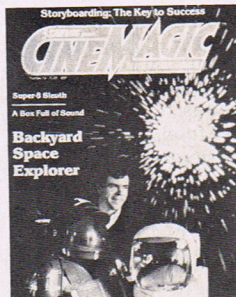


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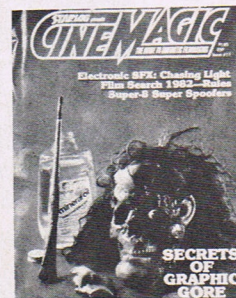
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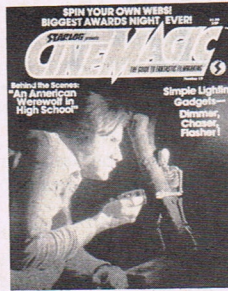
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#17—Script Writing, Part 3; Production Managing Low Budget; Electronic SPFX—Light "Chaser"; CINEMAGIC/SVA Contest Rules; Secrets of Graphic Gore; Profile—Chris Callaghan and Bob Griffith.



#18—Making Monsters; Tie-Downs for Animation Models; Accessories for Filmmakers; Electronic SPFX—Redesigned Sound Generator; Profile—Al Magliochetti.



#19—CINEMAGIC/SVA Awards Night; Build Your Own Cob Web Spinner; High School Werewolf; Careers—George Melies; Electronic SPFX—Lighting Gadgets.



#20—Articulated Full Head Masks; Dream Screen; Precision Ball-and-Socket Armatures Parts; Electronic SPFX—Sync Strobe.



#21—Custom Spaceships; Electronic SPFX—DC Strobe; Careers—Robert Short; Foam Rubber Build-up Method; Creating a Monster; Profile—Deborah Von Moser.

#22—Miniature Landscapes; Electronic SPFX—Strobe Accessories; Title Spinner; Ball-and-Socket Armature Parts; Making Creature Makeup; Profile—David Casci.



#23—Microcomputer Animation; Make Your Own Cross-Star Filter; Animation Armatures; CINEMAGIC Back Issues Guide; Mark Sullivan's Highrise; On Location—Zyzak is King.

#24—Awards Night; Scratch-Building Model Spaceships; Glowing Eyes for Creature Masks; Animation Tips; Easy Armatures; Careers—Roger Corman's Millennium Studios; EZ Effects—Make Your Own Fog Filters.



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Filmmakers' FORUM

A regular department devoted to readers' comments about filmmaking, their problems and solutions.

Contact Filmmakers!

... You can contact filmmakers whose work interests you or who happen to live in your area, simply by writing to them at the addresses listed with their letters. CINEMAGIC encourages filmmakers to contact each other and possibly collaborate on projects. For more names and addresses, see Producers' Bulletin Board

Latex Scratches

... I have found a way to create quick and easy, realistic looking scratches using liquid latex.

To make marks like the type a person gets from a cat's claws or sharp twigs, first get a toothpick and dip its pointed end into some latex (preferably flesh-colored). Now draw a thin line of the latex on your arm, face, or wherever the scratch is to be. Give it a minute to dry, then use the other end of the toothpick to make an irregular line of red grease paint over the latex. Clotted drops of "blood" can be used to top off the effect by mixing red food coloring with some more latex until you have an average blood color. Add it to the top of the scratch and allow it to dry until it has turned a dark "dried blood" color.

Liquid latex peels easily from skin but it is almost impossible to get out of clothing, so be careful. I would like to correspond with other filmmakers.

Steve Bydal
2912 Jaffe Rd.
Wilmington, DE 19808

Arizona Film Club

... I am a filmmaker living in Phoenix, Arizona. I do general SFX and stop-motion animation in addition to making films.

Other than myself, I have only two friends who work with me on movie projects, and could very much use some extra help. If there are any other filmmakers in the Phoenix area who would consider working jointly in making a movie and/or beginning a film club, please contact me at the following address:

Atomic Films
c/o Kevin Hedgpeth
4231 N. 31st Ave.
Phoenix, AZ 85017

Makeup Tips

... I have come up with my own blood formula, which goes as follows: four ounces of red food coloring, one teaspoon of flour and 16 ounces of warm water. I have found that this formula is very realistic looking on film and will not stain if cleaned up fairly quickly.

Also, for brain effects, I've found that molding gel toothpastes (preferably blue) and then storing it in the freezer makes an extremely realistic brain for splattering.

I am interested in getting in touch with other filmmakers in the Davenport, Iowa area for possible collaboration. Anyone interested in working on a film with me should write to me at the address below.

Robert Basil Long II
RBL Productions
1026 Arlington Ct.
Davenport, IA 52803

... For legendary makeup artist Dick Smith's blood formula, see CINEMAGIC #2.

Western New York Film Group

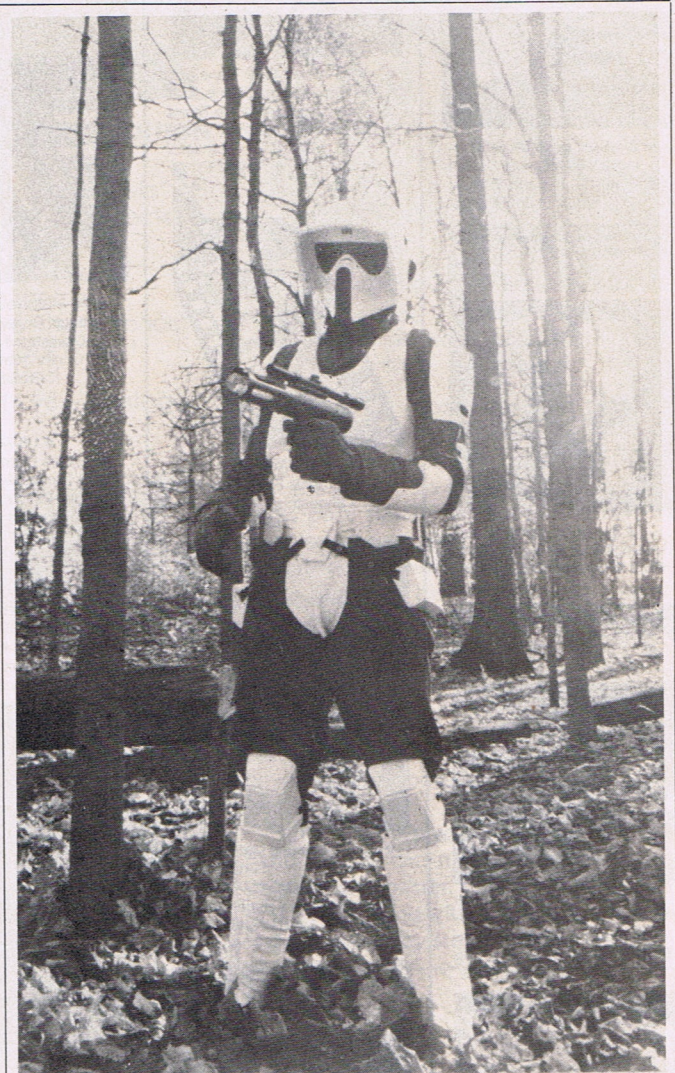
... I am in need of any serious individuals in the western New York region who are interested in collaborating on a fantasy/adventure film incorporating all areas of special effects technology and the crafts of filmmaking. Any and all help will be most welcome!

Michael Szymanski
4905 Gasport Rd.
Gasport, NY 14067

Texas Film Group

... I need help. I'm from Houston, Texas and I'm wondering if anyone in the Houston area is interested getting together in make films. I'm hoping to form a group to make films that we can transfer to video. I'm looking for people ages 16-25, who are interested in creating a good product—and hopefully some lasting friendships as well. If anyone is interested, please call me at (713) 492-6893 or write to me at the address below:

David Herrington
20230 Warrington
Katy, TX 77450



Jedi Costumes

... The above photo is an Imperial Biker Scout's costume from *Return of the Jedi*. It is solid fiberglass and a friend (Don Yates) and I made two of these costumes in a basement in South Bend, Indiana.

The construction took five-

and-a-half months and the suits cost about \$125.00 a piece. They were a lot of work and a lot of fun to make and we thought you might like to see what some loyal *Star Wars* fans were up to.

Edward R. Endres
1433 Cambridge Dr.
South Bend, IN 46614

Attention Filmmakers!

... Do you want your short film included in a collection of the country's best independent films—to be internationally released as a major feature?

O'Quinn Productions, a division of STARLOG Press (Publisher of CINEMAGIC) is producing a unique feature Compilation of shorts—and

they're searching for new independent talent!

Eligibility: If your film falls within the genres of science fiction, horror or fantasy (or any combination of these categories including comedies and spoofs), is 16mm or 35mm and is any length up to 30 minutes, then you are eligible.

Judging: All entries will be

screened and judged by the staff of O'Quinn Productions. Finalists will be notified by mail or telephone. Films not chosen will be returned immediately.

Schedule: All finalists will receive a contract covering terms of negotiation, plans for inclusion of their film in the Compilation, and distribution of the Compilation. All films will be blown-up or reprinted to 35mm. The feature Compilation is slated for a fall 1984 release, so send for your entry form now.

The deadline for entries is July 1, 1984. For entry forms, send a S.A.S.E. (#10 size) to: O'Quinn Productions, c/o Entry Forms, 475 Park Ave. South, New York, NY 10016. Send entries to O'Quinn Productions, 475 Park Ave. South, New York, NY 10016. For further information phone Damon or Linda at (212) 689-2830.

Washington State Film Club

... I would like to get all CINEMAGIC, FANGORIA and STARLOG readers in my area (Washington, Montana, Idaho) interested in starting a film club through ideas and correspondence. I have had many years of film experience using 8mm, Super-8, 16mm, 35mm stills and most of all optical printing! I

have made many films and worked on three major motion pictures here in Washington and down in California as an "extra" and in production of special effects setups. Locally, I would be interested in making films with other club members but overall I'd be glad to correspond with filmmakers throughout the world. I am 26, interested in all areas of filmmaking as a whole and want to get together to make films and discuss ideas. Please write to me.

Robert Trompeter
1018 South Saint
Charles Road
Veradale, WA 99037

Southern California Film Club

... I am trying to get a group of filmmakers together in the Long Beach area to work on a science fiction film production. Anyone who lives in the Long Beach area who is interested in participating, please contact me at the address below.

Dean Curtis
293 Harvard Lane
Seal Beach, CA 90740

Elusive Illusions

... In CINEMAGIC #5's Filmmakers' Forum, you mentioned that all books reviewed by CINEMAGIC are available at

local bookstores. This, however, seems not to apply to Tom Savini's *Grande Illusions*, which was reviewed in issue #20. I have been to a number of bookstores and according to their reference books, *Grande Illusions* is not in print, and therefore they can't order it! How, may I ask, can this elusive book be obtained if even bookstores don't know it exists! Or does it?

Eric R. Holder
1 Ridgeway Ave.
Ossining, NY 10562

... Tom Savini's wonderful *makeup effects book*, *Grande Illusions*, can be ordered directly from Starlog Press. Send \$12.95, plus \$2.50 postage and handling (\$5.00 foreign) to: Starlog Press, 475 Park Ave. South, NY, NY 10016 and specify that you want a copy of *Grande Illusions*. An order form listing many exciting books and publications, including *Grande Illusions*, can be found in the Starlog Trading Post section of the latest issue of STARLOG magazine.

A Direct Line!

... Readers who have access to CompuServe can contact CINEMAGIC's Editor David Hutchison directly through E-Mail. His User I.D. is 71036,1477. He can also be reached through M.C.I. Mail.

Maryland Movie Maker

... I'm a filmmaker residing in the Oxon Hill area of Maryland. I am looking for anyone who is seriously interested in working on a feature length movie for possible theatrical distribution. Anyone who is interested can write me at the address below, or call me at: (301) 567-3982 after 6:30 PM.

Dragon Film Studios
c/o Larry Heffner
8101 Kerby Pkwy. Ct.
Fort Washington, MD
20744

CINEMAGIC Writer's Guide

... The CINEMAGIC Writer's Guide is now available. If you have an article in mind for CINEMAGIC and would like to know what we expect to see from our writers, send a self-addressed, stamped envelope (business #10 size) to the address below.

CINEMAGIC Writer's Guide
475 Park Ave. So.
New York, NY 10016 CM

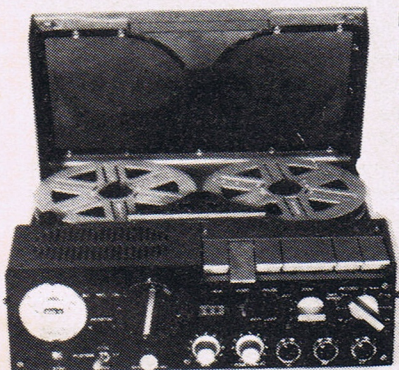
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Super 8 Sound™

SO HOW COME YOU HAVEN'T GONE V I D E O ?

Without a belated argument of rationalization of all the pluses that film has over tape for original production, let's just say that for us and thousands like us there is enough depth in what we do that being able to see it 5 seconds later is not important, and we respect our audiences enough not to bore them with 2 hours of anything shot on one continuous take. So for those who choose to be filmmakers, we offer our services as equipment suppliers. We carry the most complete line of Super 8 equipment available in the world today. From flatbeds to splicers, from film to the most sophisticated Super 8 cameras made, you will find them at Super 8 Sound. Ultra wide angle lenses, matte boxes, underwater housings, single or double system for beginners



or professionals, you will find it at Super 8 Sound. From the latest in projection illumination to old stand-bys such as leader and gaffers tape, the Wurker splicer, Bonum reels and cans; now you know where to go. Super 8 Sound. Familiar names such as Nizo, Goko, Beaulieu, Bogen, Canon, Elmo and Chinon to name a few; books on film, magazines on filmmaking, information on film festivals, or special products such as optical printers and film strippers; you'll find out about them all at Super 8 Sound. So write for a FREE price list, send \$3.00 for a full info pack, or drop by our showroom. Get in touch with us so we can keep you informed about Super 8.

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"The source for Super 8"

The Time Machine

Build this intervalometer and unlock the secret of time travel in fantasy films.

By CHRIS E. STEVENS

Time-lapse cinematography has the magical power to compress time and shorten the day—that is, if you want to “shorten the day” on film. That’s what this project does. It’s designed to provide a way to trigger a camera either mechanically or electronically. It also allows you to choose the amount of time

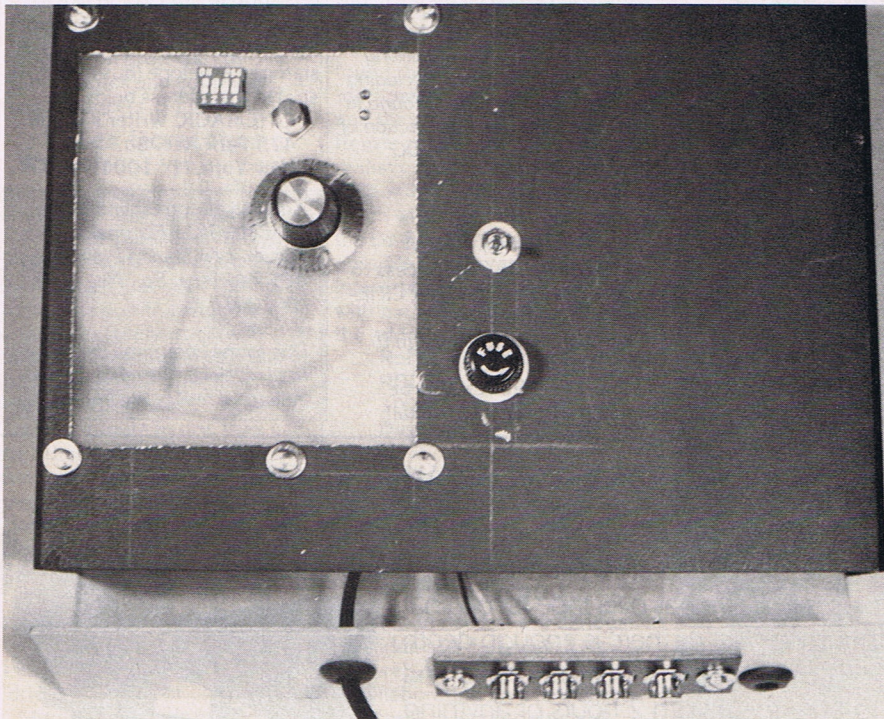
between each tripping of the camera shutter. The “mechanical” section consists of a solenoid which pulls inward when it’s pulsed, and a lever action which converts the “pull,” to a “push.” This pushing action, when attached to a camera cable, activates the camera’s shutter release. The “electronic” portion has four external out-

puts which are triggered by the same transistor that activates the solenoid. The output swings from the B+ voltage to B-, which will trigger the previous projects; strobe and frame counter.

What you will have when you’ve completed this project is an *intervalometer* with two types of output: mechanical, and electronic. In addition, you will have the ability to choose from four separate time ranges, manual trigger, and also variable delay control in all ranges. Another feature allows you to combine the basic time ranges for the maximum time delay available from this project.

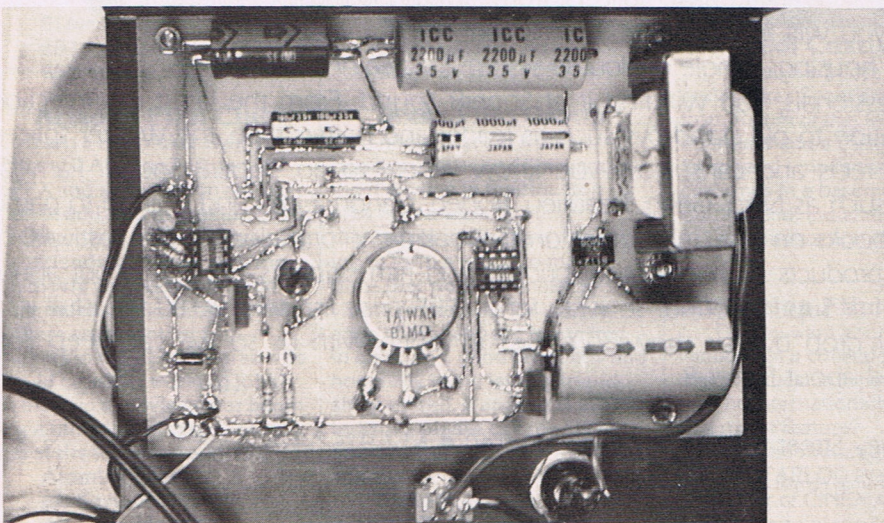
As usual, there is a power supply section, which consists of T1, IC-1, C-1, and IC-2. IC-3 and IC-4 are 555 timer IC’s. IC-3 is the basic timer itself. IC-4 is a retriggerable one-shot that guarantees that the solenoid will fire—regardless how short the trigger pulse from IC-3 is. Q-1 is the driver transistor for the solenoid and the external output jacks. L-1 is the power indicator lamp, and L-2 is the timer output indicator, which will flash with each activation of the unit. The LED will not completely go dark between pulses because of the way it’s biased. This causes the LED to illuminate about half-way, and brighten up to full brightness with the activation pulse from IC-3, or from the manual trigger.

I’d like to call your attention to a few specific items on the circuit board layout, so that we can avoid any confusion. You’ll find that the photographs will also be very helpful. Occasionally, you will come across a few dotted lines on the PC layout. These won’t be found on the schematic. These dotted lines are there to indicate the need for a wire “jumper” from point-to-point on the PC board. IC-2 is a regulator IC, and the legs are identified by IN, GROUND, OUT configuration, corresponding to the “I,” “G,” and “O” on the layout. At VR-1, there is a resistor marked only as “R.” This is a 1 K-ohm, ¼ watt resistor. Its purpose is to limit the maximum speed that the unit will trigger. I consider it a part of VR-1, and because of this, did not singly list it. On IC-3 and 4, the pin number 1 is designated by the small dot at the end of the solder pad, inside the pinouts. SW-2, is a four position mini-dip switch used frequently in computers. When drilling the mounting holes, be sure that you include the holes for switch #2 and VR-1. The hole size for L-1 and L-2 will depend on the size of the LED’s that you



PHOTOS: CHRIS E. STEVENS

A top view of the completed intervalometer mounted in the project box. The outputs will trigger the previous projects in this column; the movie sync strobe (CINEMAGIC #20) and the digital frame counter (CINEMAGIC #25).

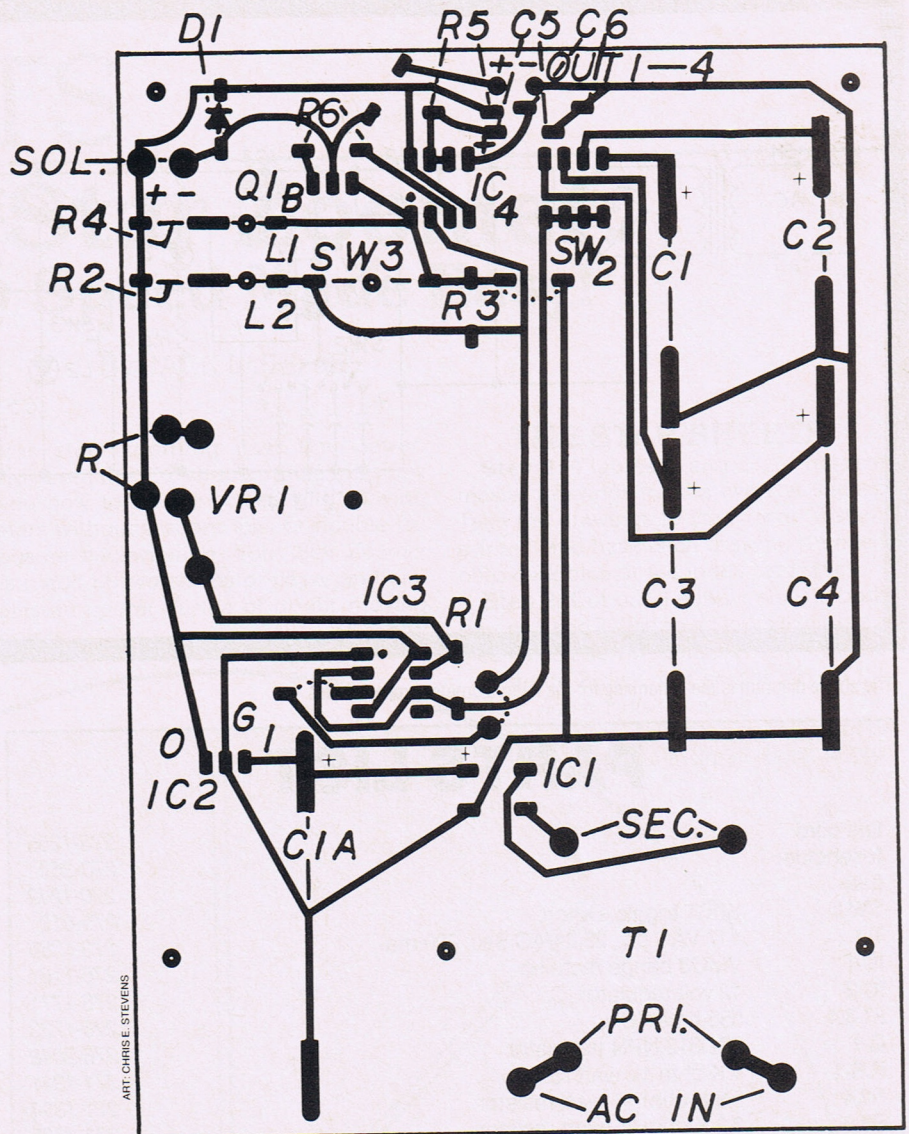


Interior view of the completed circuit board mounted in the project box. Use this photo as a guide for parts placement and wiring. The PC board layout is reproduced actual size on the opposite page.

choose. I used some straight-pin types that I had purchased in an LED pack of 20, from Radio Shack. It's OK to use regular LED's and bend the leads over to solder them to the pads. That was the original intention before I found these others.

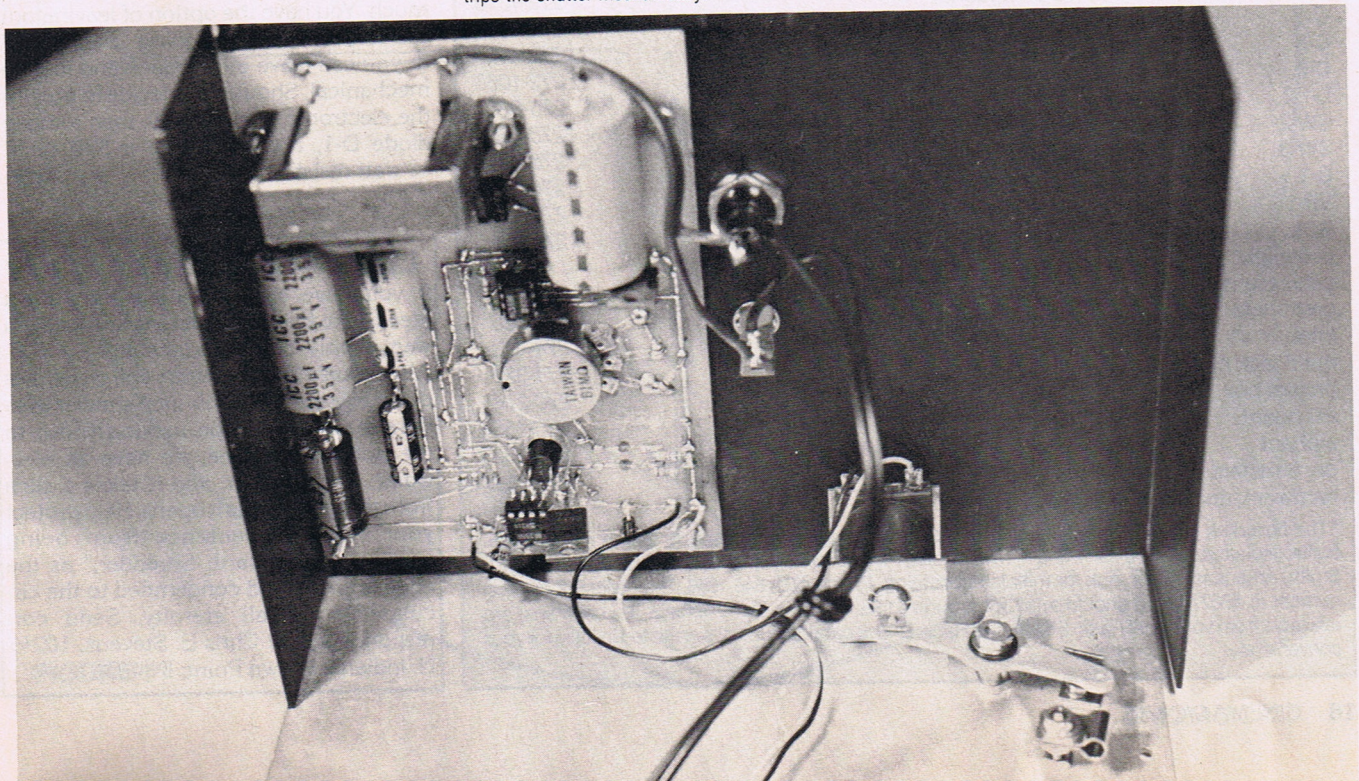
The item I used for the lever action of the mechanical function of the intervalometer came from my local hobby shop which specializes in remote control aircraft and the like. It's what they call a "bell crank" and it's used on the servo's to control the aircraft. It's propped up on a bolt and held in place by tightening a nut on both sides of the flange. Then, taking some cable clamps, I also hoisted them up on another bolt, so that I can use this as the cable clamp. If you study the photographs closely, you'll get the idea. The additional metal piece is to limit the outward push of the solenoid rod, and keeps the mechanism in its "active" range. In other words, the metal rod in the solenoid must be within a certain range of the electromagnet, otherwise it won't have the "pull" it should have. Once you have this much adjusted, all you have to do is mount the shutter cable up to the lever and clamp it down. The pushbutton should just lightly touch the lever in its full back position. The spring action of the solenoid's shaft keeper pin, and the spring from the camera shutter release mechanism will take up the "free play" in the lever mechanism.

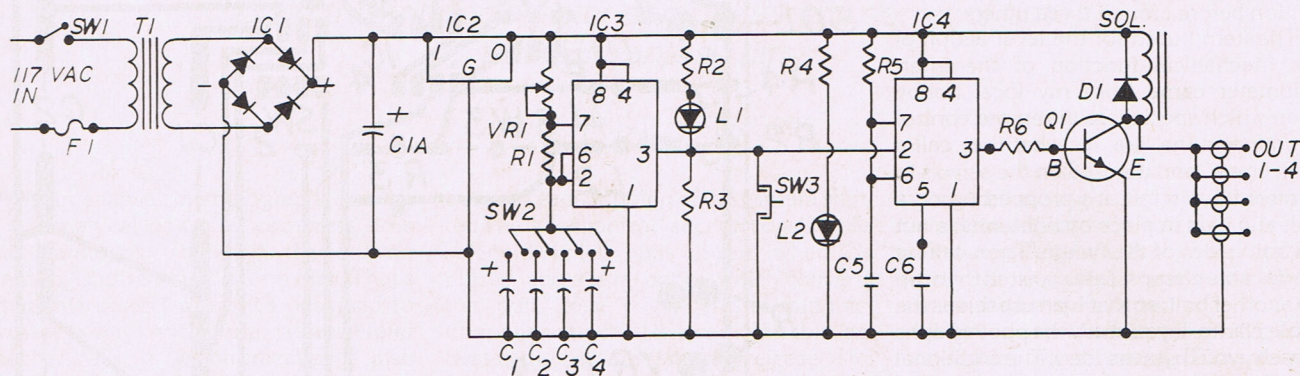
If you should use the project box I used, be sure to center the PC board on the front and rear of the lid. Remember, the base of the box is smaller than the lid, so that there is a small lip on the front and rear sides. The PC board must fit properly when the box is finally assembled. Also, make sure that the electronics are mounted on one side or the other. This is because the mechanics will occupy the other side.



ART. CHRIS E. STEVENS

Above: The PC board layout, shown actual size. For information on how to etch the PC board, see CINEMAGIC #13, page 27. **Below:** Another interior view of the completed project shows the placement of the "bell crank," at lower right. A cable release is mounted in the little bracket and the "bell crank" trips the shutter mechanically.





The above diagram is the schematic for the intervalometer project circuit.

PARTS LIST

line cord
fuseholder
fuse

SW-1	SPST toggle switch	278-1255
T-1	117 VAC pri., 25.2 VAC Sec. 300 ma.	270-362
IC-1	VMO8 bridge rectifier	270-1242
IC-2	12 volt regulator IC.	275-612
IC-3,4	555 timer IC's.	273-1386
Q-1	2SD313 NPN transistor	276-1161
R,R-1	1 K-ohm ¼ watt resistor	276-1771
R2,4	1.8 K-ohm ¼ watt resistor	276-1723
R3,6	2.2 K-ohm ¼ watt resistor	276-2048
R-5	47 K-ohm ¼ watt resistor	271-1321
C1A,4	2200 uf., 35 VDC capacitor	271-1324
C-1	100 uf., 35 VDC capacitor	271-1325
C-2	470 uf., 35 VDC capacitor	271-1342
C-3	1000 uf., 35 VDC capacitor	272-1020
C-5	1 uf., 50 VDC capacitor	272-1016
C-6	.01 uf., PC capacitor	272-1018
L-1,2	LED's	272-1019
SW-2	4 position mini-dip	272-1434
SW-3	SPST pushbutton	272-1065
D-1	rectifier diode 1 A. 50 PIV.	276-026
VR-1	1 megohm variable resistor	275-1304
SOL.	12 VDC Solenoid	275-1547

bellcrank*

cable clamps

grommets

knob

quad jack panel

project box

PC board

etchant

dry transfers

hardware, and hook-up wire.

64-3028

64-3025

274-413

274-322

270-274

276-1587

276-1535

276-1577

*The bellcrank should be available at your local hobby shop which specializes in model radio-controlled aircraft. If you can't find it, write or call: Fox Manufacturing Company, 5305 Towson, Ft. Smith, Arkansas, 72901. Ask for their latest catalog. Phone (501) 646-1656. The bellcrank catalog number is #86778, and should retail for around \$1.95. All parts listed (except the bellcrank) are available from your local Radio Shack. The Radio Shack catalog numbers are listed in *italics* for your convenience.

If you'll notice, I've been referring back to the photographs quite often. If you take the time to look, you can discover a great deal. The reason for this emphasis on the pictures is that in the past, I've received mail, all of which could have been answered just by looking at the photos. This will save you time—and wasted energy—writing and waiting for a reply. However, just because I said that, don't feel that you've got to quit writing. If for some reason, you don't understand something about the project, or if you have an idea or need for a particular item, then by all means... write! I'll answer it as soon as possible.

All of the parts of this project are available from your local Radio Shack store, and the total cost won't be all that much. You have the option of leaving out the solenoid and just going "electronic," or you can leave out the jack and just go mechanical. Should you decide to go with the electronic outputs only, then remove diode D-1, and substitute a 330 ohm, ¼-watt resistor.

CM

LET'S HEAR FROM YOU!

If you have any comments or project ideas, take the time to let me know. If you want a reply, be sure to include a S.A.S.E. Also, please fold the letters and envelopes down to a size about ½-inch smaller than the size of the envelope, tucking it down to the bottom. You see, we have an electronic letter opener, and it takes a slice from the top edge as it opens. Help protect your valuable sentence from being eliminated by "Darth Shredder," as the edge is sliced and condemned to the circular file for all eternity. Send correspondence to: Chris E. Stevens, 102½ N. Indiana, Crown Point, IN 46307.

Easy

EFFECTS

E-Z Star Zoomer: Warp Speed Made Easy!

By JACK IMES, JR.

The ship's captain gives the order, "Ahead warp factor one!" On the view screen, the stars suddenly begin to move. As the ship picks up speed, the stars seem to streak past in a never-ending stream.

Okay, it's a great effect, but how do you get it on film? The usual method is to use an animation stand to photograph the sheet of pinhole stars in a series of repeat zooms. After several double-exposure passes, the result is a shot of end-

less stars zooming past the viewer. However, this E-Z effects article will show you how to fill the screen with moving stars without a zoom lens or double exposure backwinding. Your *Star Zoomer* is made of two sheets of paper and creates an *optical illusion* of bright moving points of light!

THE STAR SHEETS

Step 1: Figures 1 and 2 are full-size master drawings for the two star sheets. Take the drawings to your local "instant printer" and have each drawing Xeroxed onto dark blue or red index card stock.

Step 2: Cut out the inner slots in both figures 1 and 2. Use an art knife to assure a clean cut line for figure 1. Cut out the figure 2 disk, but *do not cut out the figure 1 disk drawing.*

Step 3: Use the pencil point to punch a small hole in the

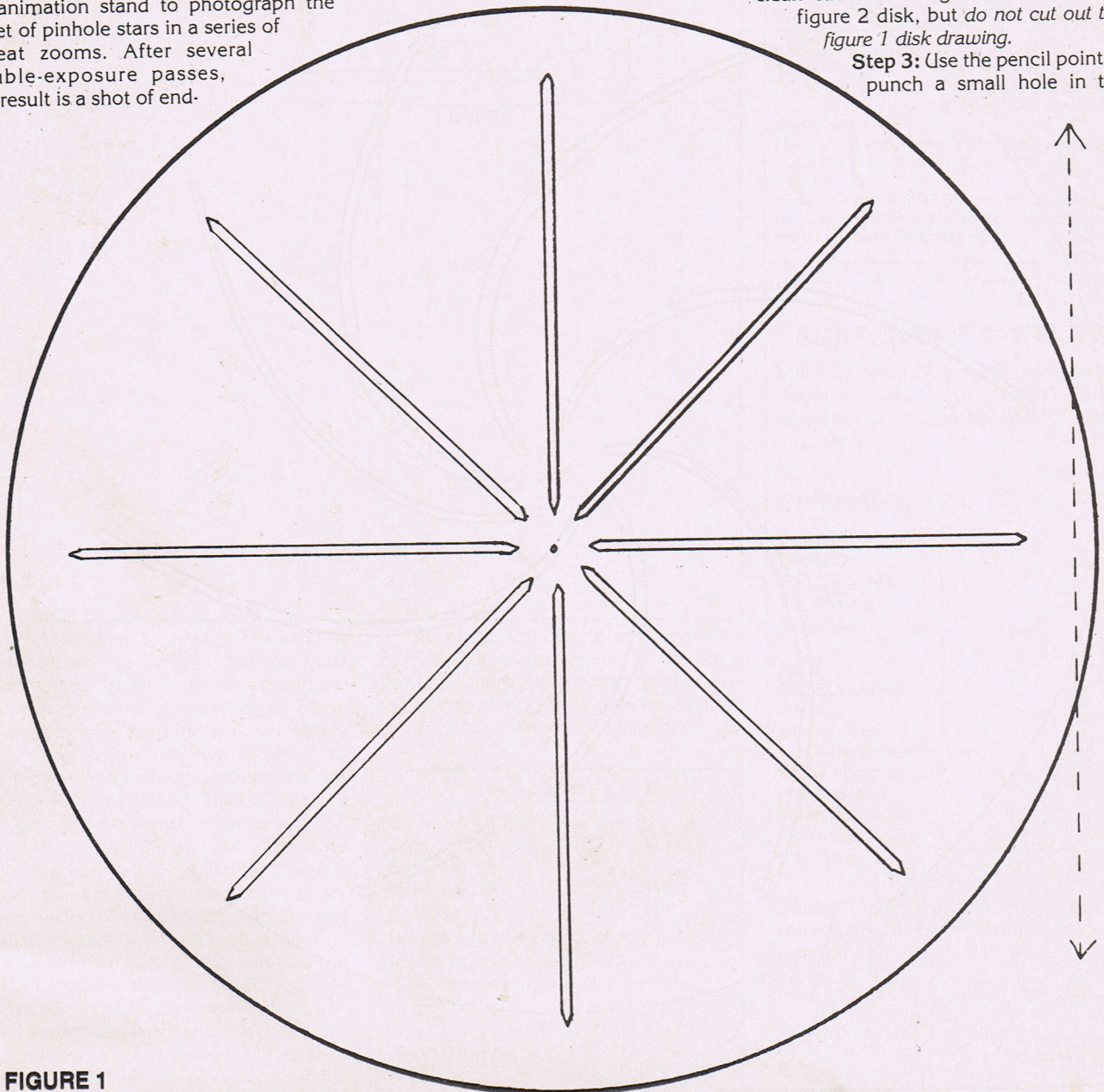


FIGURE 1

centermark of figures 1 and 2. This hole will later be used for the brass paper fastener.

Step 4: With black felt tip pen or broad nib dry marker, *blacken both sides* of figures 1 and 2. This is the easiest way to assure that the disks will be dark enough to prevent light from filtering through the paper later. Make sure you have a newspaper or old magazine beneath the sheets as you work to avoid the ink "bleeding through" the paper onto your good tabletop.

Step 5: Push the brass paper fastener through the hole in the center of the figure

1 sheet. Place the figure 2 disk against 1 and push the fastener shank through the figure 2 center hole. Spread the fastener shank to firmly anchor the two sheets together. Work the figure 2 disk back and forth to enlarge the centerhole slightly to permit the disk to rotate freely.

Step 6: Blacken the head of the brass fastener with a bit of black flat enamel paint.

serves as the support for the figure 2 disk. The side opposite the disk is the side to be photographed. The entire sheet must be backlit for proper "star" exposure. However, first you must make an additional cut on the figure 1 sheet. Cut a portion out of the Figure 1 sheet at the line indicated by the dashed line in the original figure 1 drawing. Use scissors and make sure you don't cut the figure 2 disk accidentally. This will give you a slight edge of the disk beyond the sheet so you can rotate the disk with your fingertips.

Step 2: To backlight the disk, you can either tape the sheet to a large window or

MOUNTING THE STAR SHEETS

Step 1: The large sheet of Figure 1

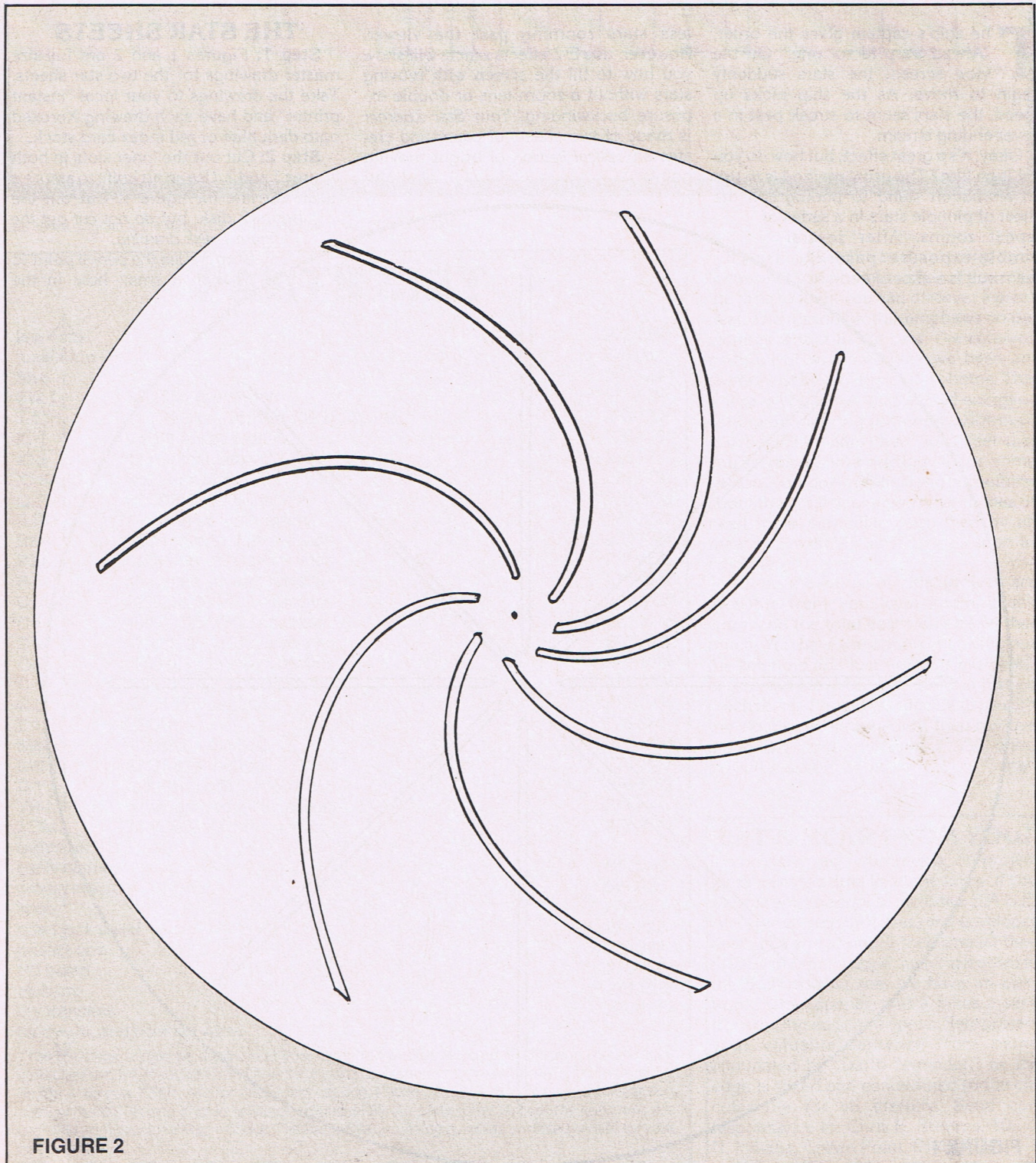


FIGURE 2

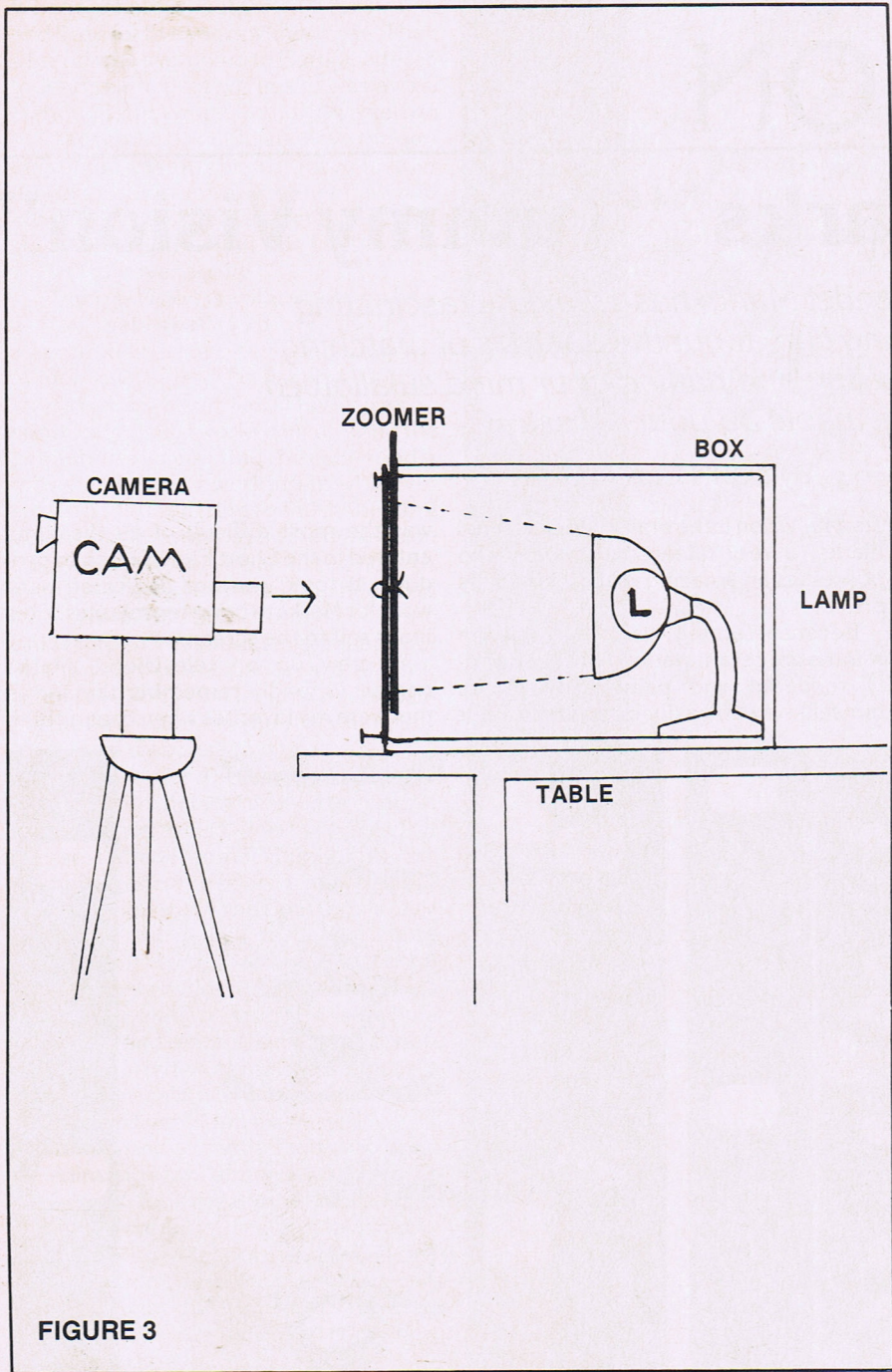


FIGURE 3

use the box seen in figure 3. The window method uses the sunlight, but you must take care to close the drapes around the star zoomer sheet so as to avoid glare. Also, you must tape black paper sheets above and below the zoomer sheet to make sure *only* the light through the star holes is exposed on film. The box method of figure 3 works best because you can shoot the stars in a dark room. The lamp in the box is aimed at the sheet and gives a good exposure on film. I suggest ordinary thumbtacks to hold the star zoomer sheet onto the cardboard box. Leave enough edge of the disk above the box so you can easily turn the disk with your fingers.

Step 3: Place the camera about three feet from the box and frame the "star area" of the front sheet. An assistant can then start turning the disk at your cue when the camera is running.

You can use the Star Zoomer with your E-Z Star Filter on the camera lens for a dramatic "starburst" at warp speed! The Zoomer also works in reverse for a vortex or "black hole" effect. Good luck! *CM*

MATERIALS

- 2 Xeroxed copies of drawings
- Black felt-tip pen or dry marker
- Pencil
- Art knife
- Scissors
- Round brass paper fastener
- Flat black paint and brush
- Small cardboard box (8 x 8 x 12-inches)
- Desk lamp or 100-watt photobulb
- Masking tape
- 4 thumbtacks



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On LOCATION

Mendel Marks' "Tummy Vision"

Animator Mendel Marks has created a fascinating and entertaining film about the dangers of watching too much television and having your mind swallowed whole by your TV set.

By JOHN CLAYTON

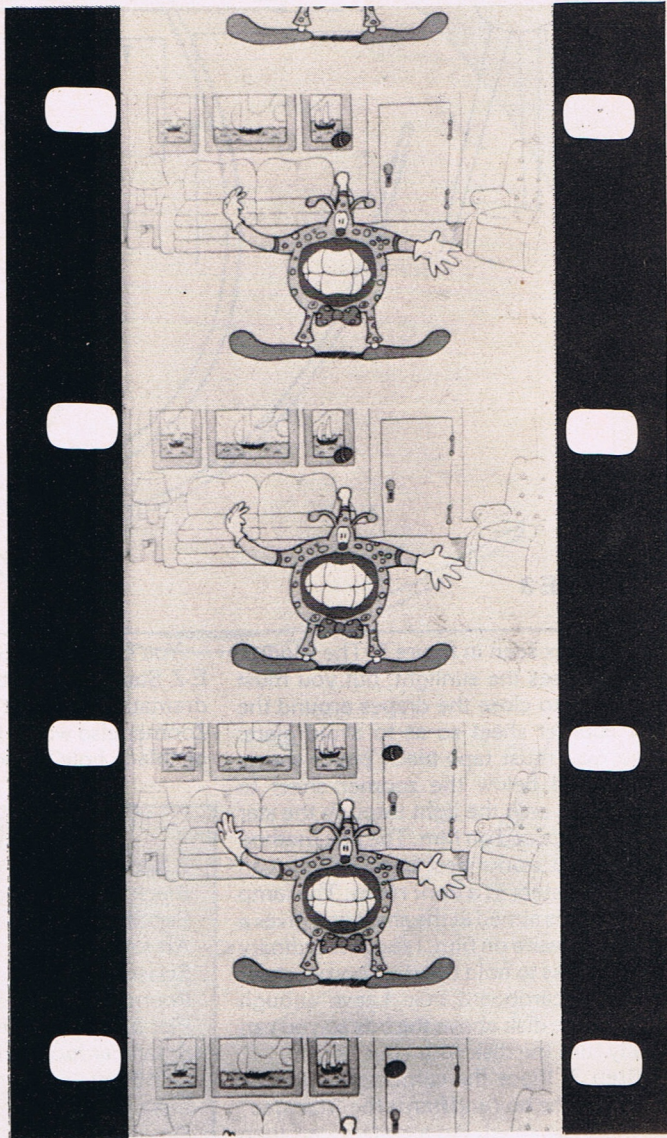
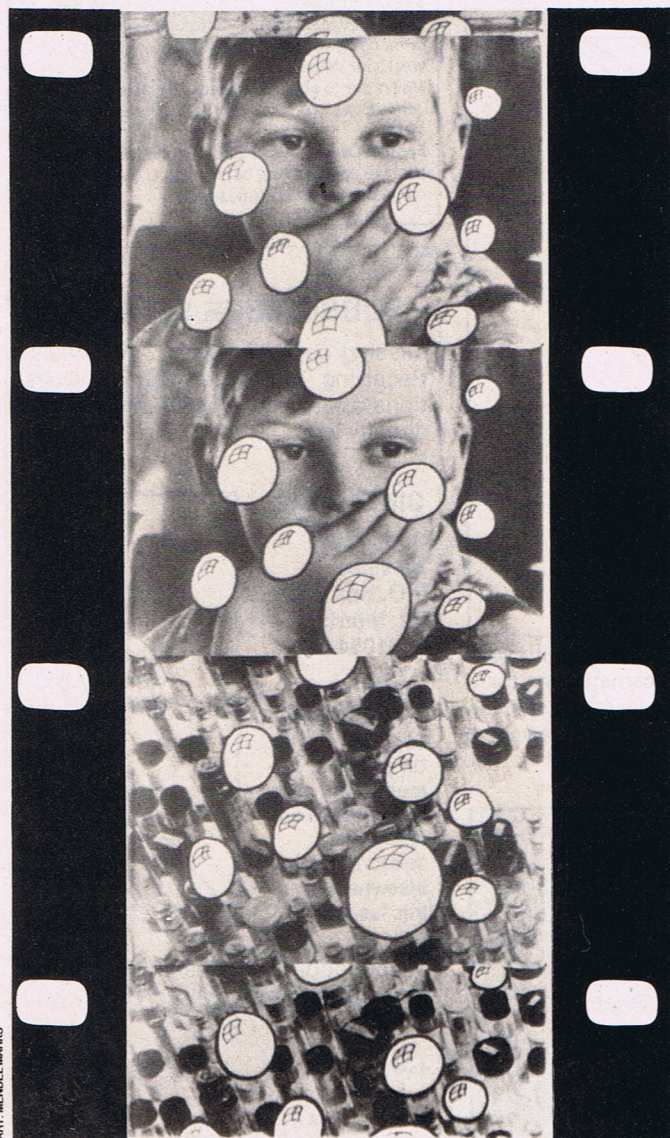
Only one of the winners of last year's CINEMAGIC/SVA Short Film Search was an animated film. *Tummy Vision*, a ten-minute animated short about a television set that comes to life and takes over the minds of three impressionable young children, tied for first place in the 16mm category.

Tummy Vision is the brainchild of Mendel Marks, a very talented animator who possesses an amazing dedication to his art.

Because *Tummy Vision* is a full ten minutes of cel animation—all beautifully rendered and painted by Marks himself—it can easily be argued that it

was the most difficult of all the films entered in the Short Film Search to produce. It took years of dedicated hard work for Marks to bring ten minutes of his inner self to the screen.

"I grew up on television," Marks begins. "I fondly remember the shows that were my favorites when I was a child.



ART: MENDEL MARKS

Marks pokes fun at commercials in *Tummy Vision*. Here he's implying they fill us with nothing more substantial than the soap suds they're selling.

TV can be very entertaining. This is its major attraction. Here Tommy Tee Vee dons a clown suit to make us all laugh.

When I got older I outgrew TV for a while and lived for five years without one. Then a friend who was going to Europe offered to lend me her set while she was away. Although I thought it would be wasted on me, I accepted. I couldn't believe the garbage that was on the air! I was further disgusted by the way my nephew and niece were becoming addicted to television, but in spite of all this I fell in love with TV all over again!

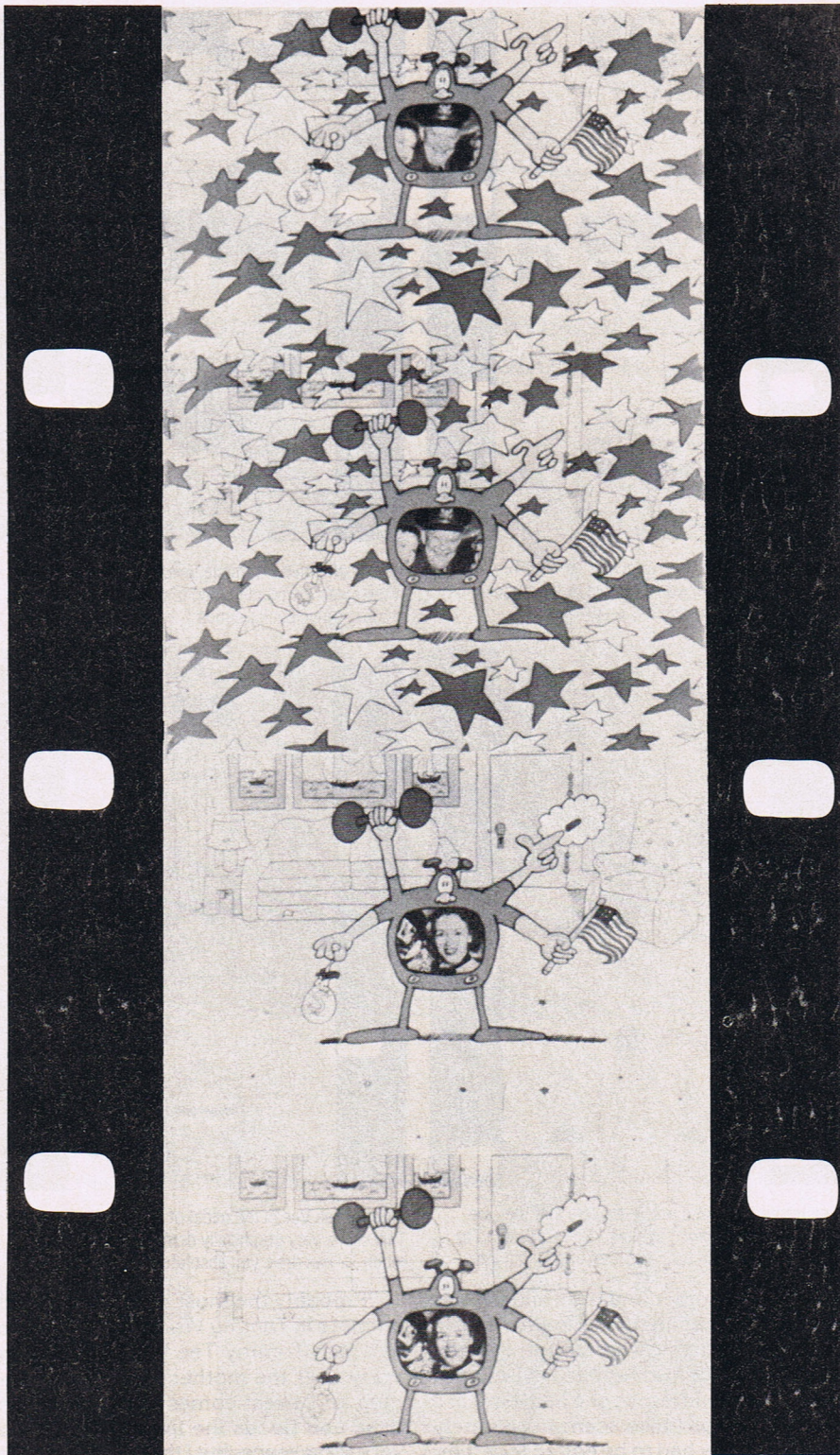
"*Tummy Vision* is a statement on how we all get swallowed up by TV—sometimes without even realizing it," Marks continues. "I became totally engrossed in the project. The TV was on constantly while I worked on drawing the animation and painting the cels—and it took five years of working in whatever spare time I could find to finish the film! When I started working on *Tummy Vision* I was a student at the San Francisco Art Institute and by the time I finished I had transferred to San Francisco State University and was about to graduate, but all the years of dedication are worth it when I see someone laugh while watching the film—or even when they have any emotional response to it at all.

"I did a comprehensive pencil test of the entire film before I started to commit the animation to cels," Marks reveals. "Of course I made some changes in the animation after the pencil test to smooth it out, but basically the final film is very similar to the pencil test—just more refined. The storyboarding and pencil testing allowed me to get all the aspects of the animation and the storyline organized and refined to my satisfaction before I started working the animation onto acetate cels, which are relatively expensive and shouldn't be wasted.

"It took one-and-a-half years to draw the animation for *Tummy Vision*," Marks confides. "It took me another two years to paint all of the cels. Of course, I was working and going to school during all of this time and didn't have the luxury of working on the film full time, but I devoted almost every spare moment I could find to making the film."

Tummy Vision is a clever combination of fully painted cel animation and photo cut-out animation. A barrage of familiar faces batter the viewer's eyes as he watches the cartoon TV screen. The television comes to life and dances and bounces around the cartoon living room, but the familiar faces aren't rendered in cartoon fashion, they're vintage black-and-white photos that are instantly recognizable and take viewers who are old enough to remember on a nostalgia trip into the golden age of television—the 1950's.

"The black-and-white images that flash by on the TV screen are actually tiny photos—almost postage stamp size—that I cut out of old *Look* magazines from the '50's," Marks continues. "*Look* had a regular feature that was a celebrity photo quiz. There were lots of tiny photos of



This scene from *Tummy Vision* suggests how television can shape your perceptions. Here patriotism and money are part of the menu of mind junk food.

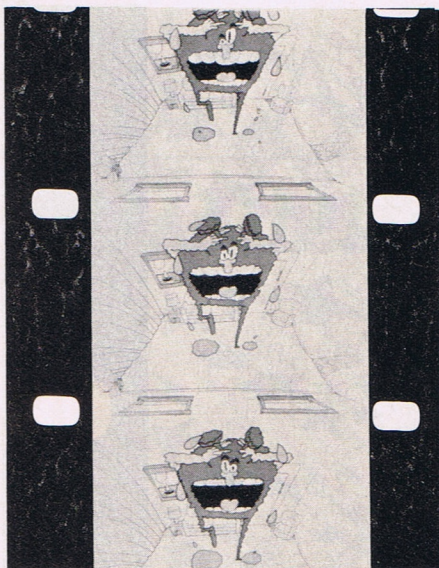
famous people you were supposed to try to identify. All the photos were the same size and I thought it would be fun to animate them in rapid-fire succession on Tommy Tee Vee's screen. Tommy Tee Vee is the name I gave to the cartoon television set character that comes to life and swallows the children and then spits them out—brainwashing them in the process."

Tummy Vision has an elaborate soundtrack that features clips from many commercials and TV shows—and the voice of

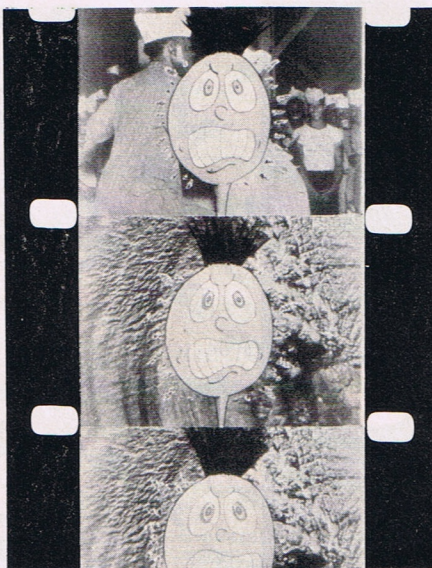
an obnoxious, over-bearing, off-screen mother who yells at her kids to be good little children and watch TV. The kids complain that there's nothing good on and they'd rather go out and play, but the mother persists because she doesn't want them to go outside and get dirty. The kids finally quit complaining as they become mesmerized by the hypnotic tube.

"I was always editing the soundtrack in my mind as I watched TV for inspiration," Marks explains. "All of the dialog be-

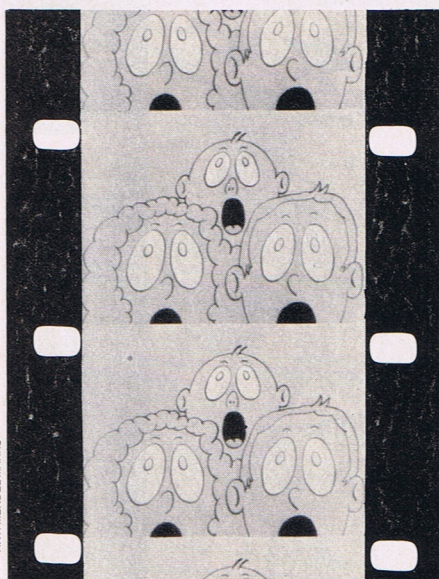
ART: MENDEL MARKS



The scene in which the room and Tommy Tee Vee change perspective was the most difficult scene to animate. The room also fills up with sweat.

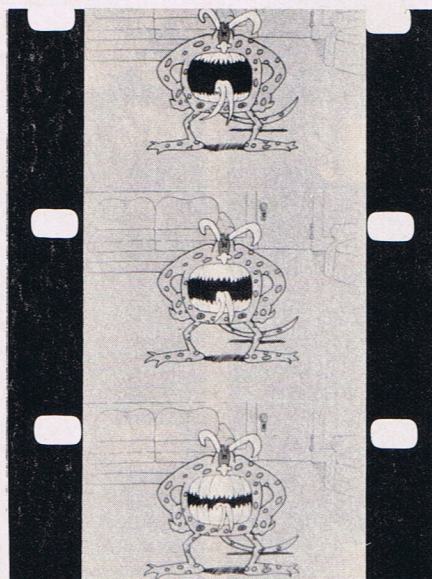


A very effective technique used by Marks in *Tummy Vision* was the combination of cartoon cels and photographic backgrounds.



ART: MENDEL MARKS

The terrified children realize too late that they are about to be swallowed by their TV set. Tommy Tee Vee is merciless in taking control of young minds.



Tommy Tee Vee in the midst of a psychotic break. This scene very graphically demonstrates how too much TV can drive you absolutely crazy.

tween the mother and the children was fully scripted, nothing was improvised. In fact, the actress who performed the mother's voice also supplied the voice of one of the children, so she had to record the voices for those scenes separately and then they had to be edited together.

The voice talent I used for *Tummy Vision* was the same group of actors I had used on an earlier film, *Little Ms. Muffett*. I knew them and felt comfortable working with them. It took three months to record all of the elements in the soundtrack and then it took another nine months to edit and mix it all together; so the soundtrack wound up taking a whole year from start to finish—and then I had to make bar sheets so the animation would match the action of the soundtrack frame-for-frame, which is of course the standard procedure, but very time consuming.

"Probably the most difficult scene to animate in *Tummy Vision* was the scene in which Tommy Tee Vee starts going crazy over the mother's incessant nagging and sweat comes flying off of his head and floods the living room. It's a very short scene, but I think it has a great deal of impact. The room changes perspective to a high, dramatic angle, the room floods with water and a boat in the picture on the wall comes out of the picture frame when the water reaches it and it goes sailing around the room. A shark's dorsal fin chases after the boat and Tommy Tee Vee goes through frantic convulsions.

"Each cel took about 20 minutes to a half-hour to paint and they only last on the screen for a 1/24th of a second! And the boat and shark fin were separate cels as well. The scene lasts only a few seconds on the screen, but it took me

over a month to animate! I think that shows a true dedication to my art."

Tummy Vision is by no means Mendel Marks' first animated film. "I've been drawing all my life, but I've been animating for about ten years," Mendel reveals. "I took a course in animation at a San Francisco museum in which I made my first animated film. It was Super-8 and only lasted about thirty seconds, but it was enough to get me hooked on animation for life. I was so totally amazed the first time I saw that I could bring my drawings to life that I knew right then and there that I wanted to make a career in animation.

"I have two other animated 16mm films that have been completed and have been shown around: *Little Ms. Muffett* and *The Gun Film*. *Little Ms. Muffett* is a fairly explicit sexual fantasy film that illustrates childhood nursery rhymes in a very off-beat way. It is included in an anthology film called *The Erotic Cartoon Carnival* which makes the rounds on the college campus circuit. *The Gun Film* is a fairly abstract short film that uses graphite and colored pencil animation instead of full painted cel animation. I also have several other projects in the works, but because animation is so time-consuming and I'm doing all the work myself, I'm not sure when they'll be ready to be released. I really make animated films just to please myself, but of course I'm overjoyed and even more satisfied when someone else appreciates my work.

"I hope to have another film—tentatively titled *The Angriest Young Man in the Universe*—completed in another year or so. I'm also currently working on a children's book."

Marks recently moved from San Francisco to Los Angeles and has taken a job at Hanna-Barbera, the most prolific and successful of the Saturday morning TV animation studios. "I'm presently working as a writer on the *Smurfs* show. My first episodes will air in the fall. I really enjoy working at Hanna-Barbera and I love writing for the *Smurfs* show because I feel that the show teaches kids some positive lessons. I've always been a kid at heart and I love being able to reach kids with some positive message.

Mendel Marks' love for animation and dedication to his craft is the driving force of his life. He sets a good example for young artists interested in producing their own animated films to follow. It took him five long years—working every spare moment he could find away from a job and college studies—to produce a ten-minute animated film. But *Tummy Vision* is an award-winning and highly entertaining film that is very obviously the product of lots of love and hard work. And as Mendel Marks would tell you himself: when you see the smiling and laughing faces in an audience of total strangers who are watching your film, all the years of work and dedication are worth it. **CM**

Stop-Motion STUDIO

“TRIPLE-HEADER”

Interchangeable heads can save you the time and expense of making an armature for every character in your stop-motion film.

BY JOHN DODS

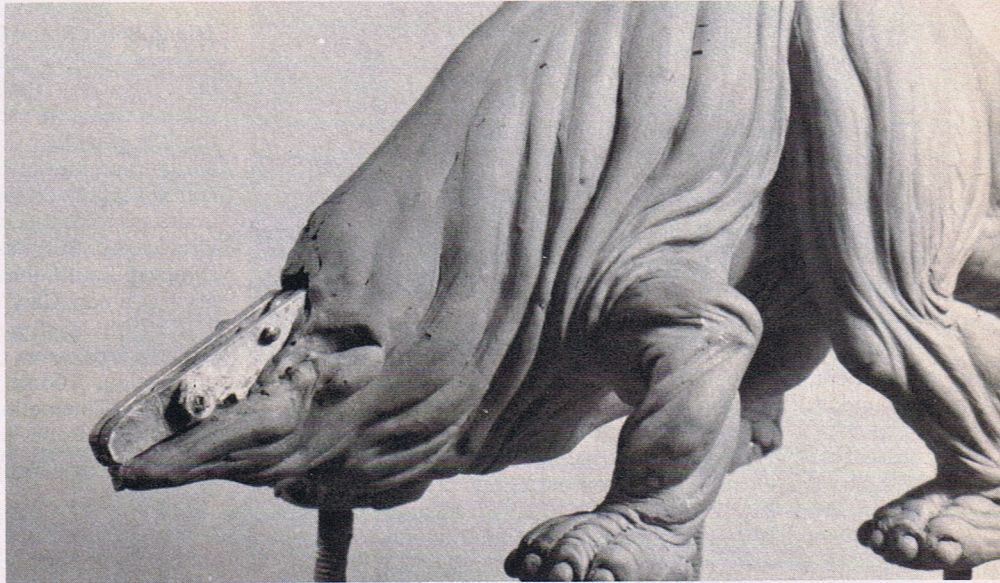
Three heads are better than one. That's how it seemed to me anyway, especially since the construction of three interchangeable dinosaur heads saved me the trouble of building three stop-motion armatures and three foam bodies for my current film project.

The system works great. Slight upward pressure removes the head that was on the armature and before you can say *Styracosaurus* a new one is in place.

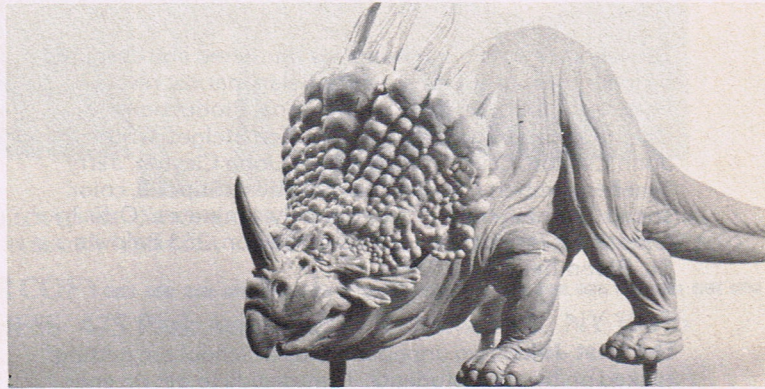
Using “Super-Sculpey”—a terrific clay-like material that hardens when cooked in an oven—I fashioned the heads to fit directly onto the steel skull of the armature.

Super-Sculpey does not get rock hard and it is breakable, so I reinforced the undersides of the heads with a layer of Epoxy putty — a two-part material that gets very hard in a few hours.

Wait till Ray Harryhausen sees this! **CM** Headless stop-motion dinosaur model is modular in construction to accept several different heads.



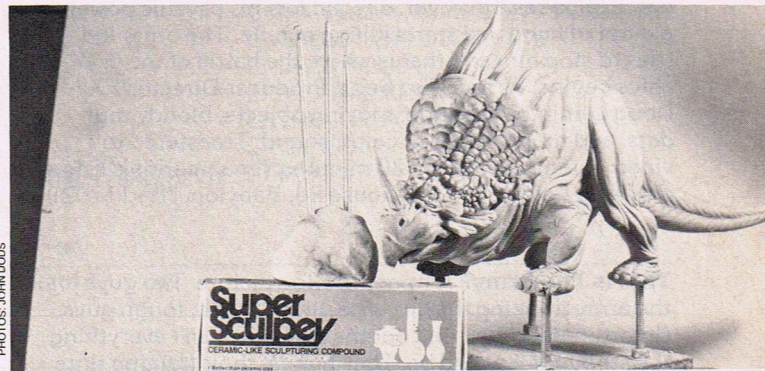
Head number one is a three-horned triceratops.



Head number two is a one-horned styracosaurus.



Head number three is a hornless protoceratops.



The dinosaur model with the interchangeable heads was sculpted in Super Sculpey.

PHOTOS: JOHN DODS

BULLETIN BOARD

Please forward announcements of film projects in current production or near completion to CINEMAGIC, c/o O'Quinn Studios, Inc., 475 Park Avenue South, New York, NY 10016. Please include a photograph of some phase of the production if possible.



Imok The Caveman. Comedy about a day in the life of a caveman who attempts to survive in a harsh and hostile environment. Producer/Writer/Director/Animator/FX/Editor/Sound: Kurt Hanson, FX include: stop-motion animation of "Imok" and other beings, including a giant snake, brontosaurus, 15-inch-tall tyrannosaurus, coelurus and a pteranodon. Other FX include front screen projection, optical effects, double exposure, miniature sets, and a complex soundtrack. 16mm, shot on color negative, sound. Running time: 15 minutes. Eight months in production with no end in sight. (Kurt Hanson, 1621 Castillo, Apt. 1, Santa Barbara, CA 93101.)

Bloody Mary. A young woman is murdered and devoured by madmen masquerading as Bolivian marxist revolutionaries. Producer: Orfis International Productions. Director/Sound/Cinematographer: Ken Steiger. Writer: John Clayton. Cast: Nancy Graham, John Clayton, Jerry Teneberg, Robert Clayton and Jim Millar. Super-8, color, sound. Running time: Approximately 4 minutes. (Orfis International Productions, c/o John Clayton, 233 Baldwin St., Bloomfield, NJ 07003.)

The Last Joke. Two unpopular kids in school are getting picked on by other students. They decide to get revenge on the other kids by using their psychic powers to pull practical jokes. However, one kid lets his psychic power get out of hand and starts killing people. The other kid tries to stop him and that is where the battle of the psychics begins. Writer: Tim Seitz. Producer/Director/FX: Doug Lethin. FX include: moving objects, bloody murders, and more. Super-8, color, sound. Transferred to video. Running time: 15-20 minutes. (Imagination's Edge, c/o Doug Lethin, 99 Lighthouse Rd, Babylon, NY, 11702.)

This is The Army? A minor motion picture. Two guys join the army thinking they'll come out as rough, tough guys. Unfortunately, they find out that the army isn't everything they thought it would be. They bungle their training time after time, then they're sent to a war zone to "help our

country. . ." Producer: R/R Productions. Directors: Rick Hibbard and Bob Pierson. Script and Ideas: the participants in the film. Cinematographers: Rick Hibbard and Rob Pierson. Cast: Rick Hibbard, Rob Pierson, Mike Davia and Rich San Filipo. FX include: bullet hits, mattes and explosions. Super-8, color, sound. Running time: who knows! (R/R Productions, c/o Rick Hibbard, 25 Laredo Dr., Rochester, NY 14624.)

Island Beneath the Sea. A Jules Verne type adventure taking place in 1893. When a scientist, his sister and their financial backer journey beneath the sea in the first submarine, they discover that one of the professor's rivals has also built a submarine. The other sub meets with disaster after being chased by the professor into extremely deep waters. Our heroes encounter a gigantic sea creature and then are pulled into a dead undersea volcano. Later, they surface in the lagoon of a prehistoric island. Surprise ending. Producer: Cinemation Films. Director: Paul Lehman. FX: Paul and Mark Lehman. Cast: Mark Lehman, Gary Wenner, Kurt Campisano and Ron Esterly. FX include: stop-motion animation, mattes, electric rays, underwater scenes (real, and made to look real). In post-production. 16mm, black and white. Running time: 12 minutes. (Cinemation Films, c/o Paul Lehman, 1942 High Park Manor, Pottsville, PA 17901.)

The Intruder. A clay-animated story about a creature named Zorak who leaves his home planet in a time-traveling ship. Zorak sets out to destroy everything in his path. He lands on a planet much like Earth and encounters a creature named Kcy. Here the battle begins! Producer/Director/Writer: Clint Young. FX include: space scenes, laser effects, blood effects, stop-motion animation and animated titles. Two years in the making! Super-8, color, sound. Running time: 4 minutes. Being transferred to VHS video. I hope to show it on HBO. (CY Productions, c/o Clint Young, 148 Peters St., Billings, MT 59101.)

Nova Man vs. the Fire Monster. In the year 1996, a giant mutant reptile emerges from Lake Erie and attacks Buffalo as a super alien lands on Earth. The two titans then battle in a struggle where only one can survive. Producer/Director/Writer: Aaron R. Brundidge. Animated cartoon. Regular 8mm, color. In production. (ARB Productions, c/o Aaron R. Brundidge, 579 Oak St., Buffalo, NY 14203.)

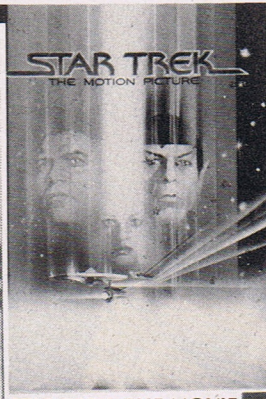
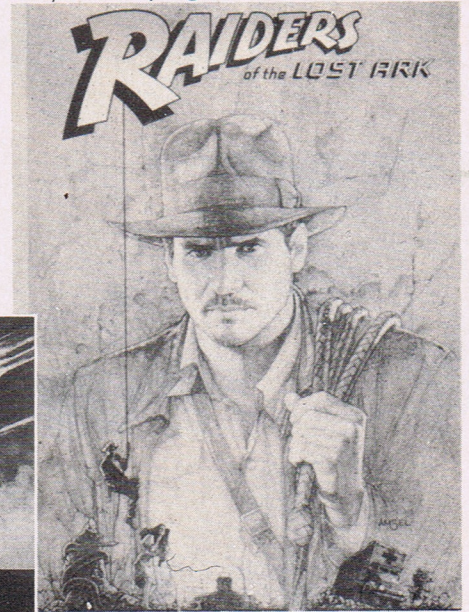
I Know What You Need. Psychological thriller. A young man uses his mind powers to force a beautiful girl to fall in love with him. When she faces the unbelievable truth, he fights back with his only weapon: his mind powers. Writer/Director: Rik Joel Carter. Producers: Ruth P. Mulligan and Peter Bylsma. Production Designer/Special Effects: John Jockinsen. Cinematography/Original music: Steven M. Vasquez. Makeup Effects: Rick Carter, Everett Burrell and Chris Biggs. Music Engineering: Don Dorsey. Super-8, color, sound. Running time: 50 minutes. Completed. (Center Cinema Enterprises, 11601 Walnut, Orange, Ca. 92669.) **CM**

MOVIE SOUVENIR PROGRAMS!

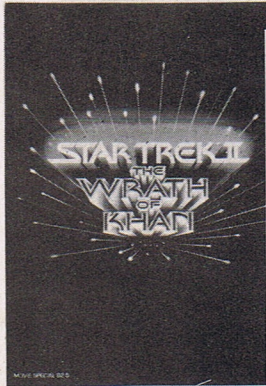
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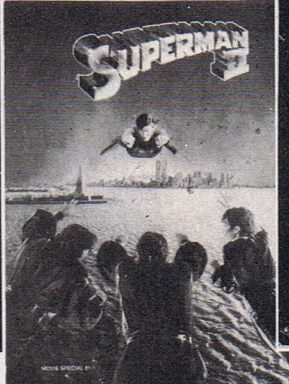
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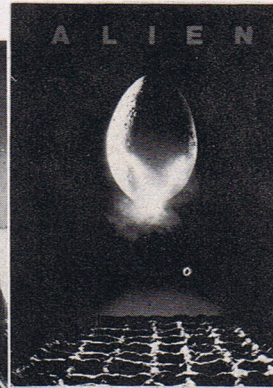
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Is Stop Motion Dead?

The technique that breathed life into King Kong, has become a dead dinosaur for today's film savvy audiences.

By DAVID HUTCHISON



Legendary stop-motion animator Ray Harryhausen animating a stop-motion model for a scene in *The Seventh Voyage of Sinbad*.

PHOTO: COURTESY OF RAY HARRYHAUSEN

Ray Harryhausen, the dean of fantasy filmmakers, is one of the most respected names in stop-motion model animation. His frame-by-frame effects work has delighted audiences for more than a quarter of a century. His first big success coming as Willis O'Brien's assistant on *Mighty Joe Young* and continuing with such cult status titles as *The Seventh Voyage of Sinbad*, *Valley of Gwangi*, *Jason and the Argonauts* up to his most recent project *Clash of the Titans*. His films as well as those of Willis O'Brien, the man who started it all with *The Lost World*

and *King Kong*, were among the seeds that inspired generations of filmmakers and special effects artists—from George Pal to George Lucas.

In 1977, when *Star Wars* proclaimed a new era in fantasy filmmaking, stop-motion continued to delight film fans with the animated chess sequences by Jon Berg and Phil Tippett. And again in *The Empire Strikes Back* with the animated Walkers and two-legged Tauntaun. This last creature was animated using a mixture of techniques, one of which would be more thoroughly developed in *Dragonslayer* and

at the same time mark the beginning of the end for stop motion as the “technique of choice” for model animation. It was to be called “go-motion” and was a natural extension of the motion-control techniques that had revolutionized model spaceship photography.

Dennis Muren, an effects supervisor at Industrial Light and Magic, and others began to have doubts about using stop-motion in the traditional manner with modern audiences. The Tauntaun in *Empire* was ILM's first attempt at going beyond classical stop-motion technique.

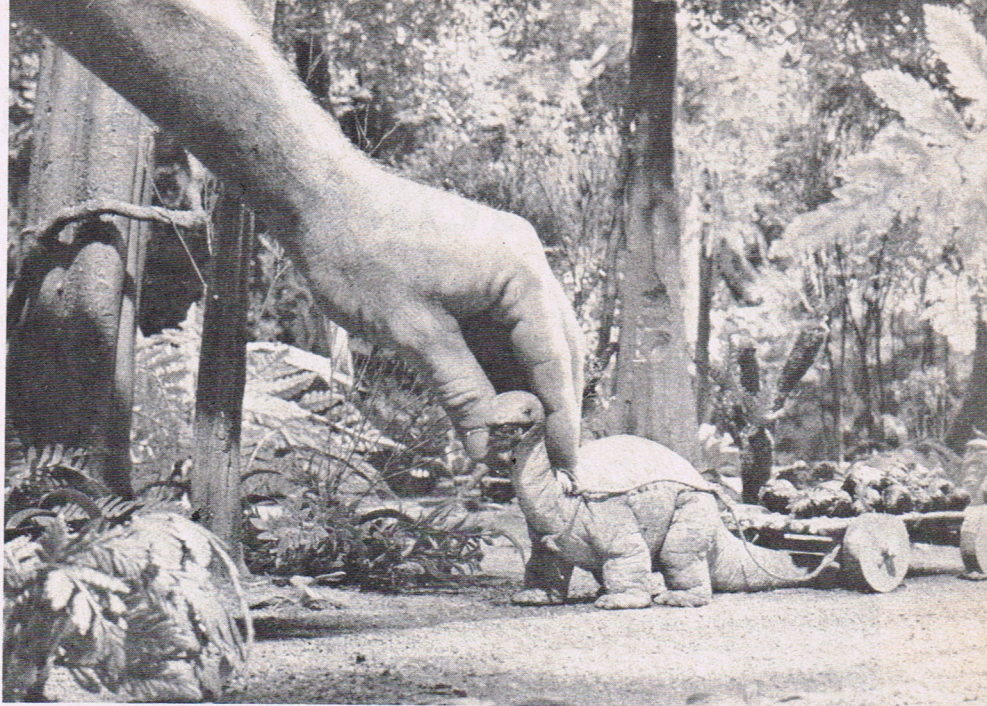
"The body of the Tauntaun," Dennis Muren explains, "was blurred going forward and going up and down when it was running, but the legs were still animated with classical stop-motion techniques. Small motors moved the body of the Tauntaun during each frame of exposure, thereby blurring the movement of the beast on each frame. When live action running or other rapid movement is filmed with a regular camera there is a slight blurring of the image on each frame. The miniature motors in the model were designed to duplicate this blurring on a frame-by-frame basis. In this way the moving animated model would match the appearance of a normally filmed subject."

Though the ILM team was generally pleased with the Tauntaun sequences when they were completed, the movie going public did not respond so positively. Many in the audience thought the Tauntaun looked "fake."

"It was about that time that I started thinking that something was wrong with our perception of the process," Muren remembers. "Many of us here at ILM grew up loving the Ray Harryhausen/Willis O'Brien films and we have a definite prejudice in favor of the technique. There's nothing wrong with that, but regular moviegoers don't have prejudices in favor of something and, to many people, the stop-motion technique is not believable."

"When we were going into *Dragonslayer*, I thought that maybe Phil Tippett, one of our stop-motion animators, should consider animating the dragon as a rod puppet—something like they had done years ago on the Amicus films. It was all I could think of, even though the result often looked terrible; but within some of those cuts from the Amicus films [*The Land That Time Forgot* or its sequel *The People That Time Forgot*] there were moments that looked real."

"An alternative which we discussed at the time was to try to put motors in a puppet. But precision motors are not small enough yet and they may not be for 15



A dinosaur animation model being positioned for the next frame of action for a scene in TV's *Land of the Lost*, which was on the air during the mid-70s. The animation sequences for the show were created by Gene Warren's studio, Excelsior Animated Moving Pictures.

years or so." But it was a daring idea. When the design of the dragon made it apparent that rod puppetry was going to be the best solution, Muren opted to motorize the rods and use motion control.

To this end Gary Leo modified an Apple computer to handle 16 channels of motion control, while Jerry Jeffress built power supplies to drive each motor and Stuart Ziff designed a go-motion carriage for the dragon puppet.

The results were a sensation. And though other techniques including stop motion and hand puppetry were used in some cuts, the shots of the dragon dragging its body through the sulphurous cavern brought new life to the art of puppet animation. . . and the beginning of the end for stop motion.


Animator Phil Tippett believes that

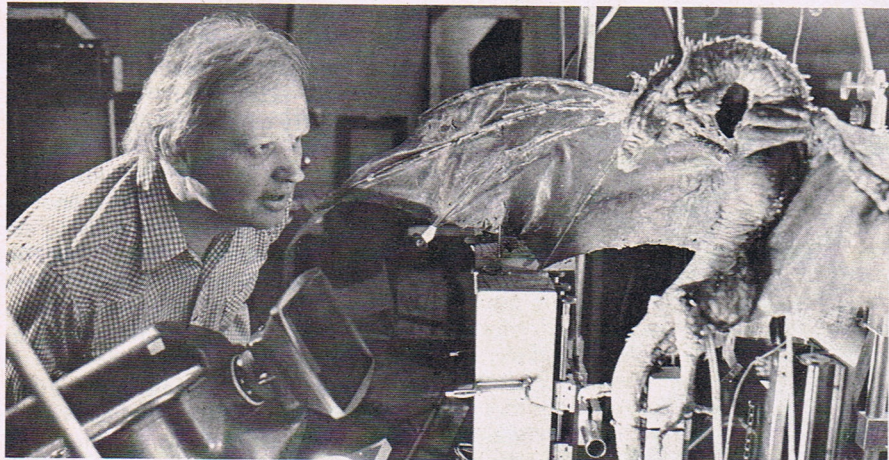
stop motion will remain as a specialized tool for specific sequences, "but I don't think you can design an entire movie around stop motion, anymore. I think that there are certain people that given the time and money to properly light and set up the scenes can get away with stop motion for certain things."

"I think that what puts off younger producers and directors today is that they see Ray Harryhausen and Charles Schnee working under enormous budget problems and having to work very, very quickly. And Ray works alone, just 'pumping' through the stuff. When you have to work that quickly the quality of the work goes down—by necessity. I think that's what people remember—the worst stuff—the jerkiness and the strobing."

"But if you are working in a low budget picture that needs some relatively inexpensive monsters and you are set up for stop-motion work, I think it would certainly be as good as anything else in that situation."

"Go-motion requires an entire studio set-up like ILM and that precludes low-budget work. You need blue screen, you need the optical department, you need rotoscope, you need the computer systems and, most important, you need weeks and weeks on every shot."

"Tippett believes that the stop-motion technique has a certain look to it as does go-motion and that today's producers want a very smooth look. And ultimately, that is where the allegiance lies—to the look, the effect, the illusion. Movies are technological masterpieces of illusion—the ultimate magic trick. And for today's audiences it's not a matter of *how* the magician pulls the rabbit out of the hat, but that he does it. And we believe it. 



Dennis Muren of ILM animating the dragon model for a scene in *Dragonslayer*. This setup is for the scene in which the dragon rears his head in the fiery cave sequence. The model is rigged with computer-controlled, go-motion puppet rods—an advance in animation technique that has led to speculation that stop-motion animation is an outmoded and dying art form as far as big-budget Hollywood fantasy films are concerned.

The Amazing “Melting Man” Effect

A group of high school film students found a unique (though messy) solution to a challenging special effects problem.

By JOE DEFFNER



Actor Richard Huebner with melted gravy and cotton skin in a scene from *A Witch in Time*.



Director of *A Witch in Time*, Joe Deffner, adjusts a tube set into actor Richard Huebner's hair. Gravy was pumped through this tube to simulate melting skin.

How in the world do you make someone appear to melt? We set out to do just that one day after school in teacher Ralph Langer's filmmaking class at North Hills High School in Pittsburg, Pennsylvania. The melting man effect was necessary for a crucial scene in *A Witch In Time*, a movie we were making in film class. As director of the film's crew of five, I can say that we were all pleased with the results.

The first step was to create the illusion of melting skin. We created this illusion by simply taking gravy given to us by the school cafeteria and dabbing it on the face of our actor, Rich Huebner. We decided to try using gravy because our school's gravy is thick, and we found that it really looked like melting skin when seen on film. We found that this shot of the incipient stages of the melting sequence was the easiest part of the scene to shoot. The rest of the sequence was very complicated to shoot because in some way, Rich had to seem to shrink in size as his skin melted.

To make Rich appear to shrink, we first made a fake floor three feet above the real floor with eight drawing tables. The tables were pushed up against the wall and a hole was left in the middle for Rich to slip through as he "melted". Because the tables had a bar that went across the bottom, numerous attempts were made in the arrangement so that it not only

would let Rich go through, but also to fit a wood plank from a scaffold through so that Rich could stand on it. This plank took the role of an elevator as four people out of the camera's range lowered Rich as he melted. Next, to make the table tops look like the floor, we taped floor tiles on them. A note of thanks must be extended to the school's maintenance department for providing us with the floor tile and the plank that so effectively created the shrinking illusion.

The fake floor allowed Rich to shrink, but since *he* was melting and not his clothes, we were faced with the problem of keeping the clothes on top of the tables. This problem seemed insurmountable, but based on his past experiences, film teacher Ralph Langer was able to come to the rescue with an idea that solved our dilemma. He came up with the idea of using torn clothes that Rich could easily slip out of as he shrank.

Rich gave us an old pair of blue jeans and we cut them from the bottom all of the way up at the seams. Then they were cut in the back and taped together. The reason for doing this was so that Rich could easily slip out of the pants as he was lowered. Next, we had to hold down the bottoms of the pant legs because they flopped around. To do this, we folded them under and glued them to the fake floor using rubber cement.

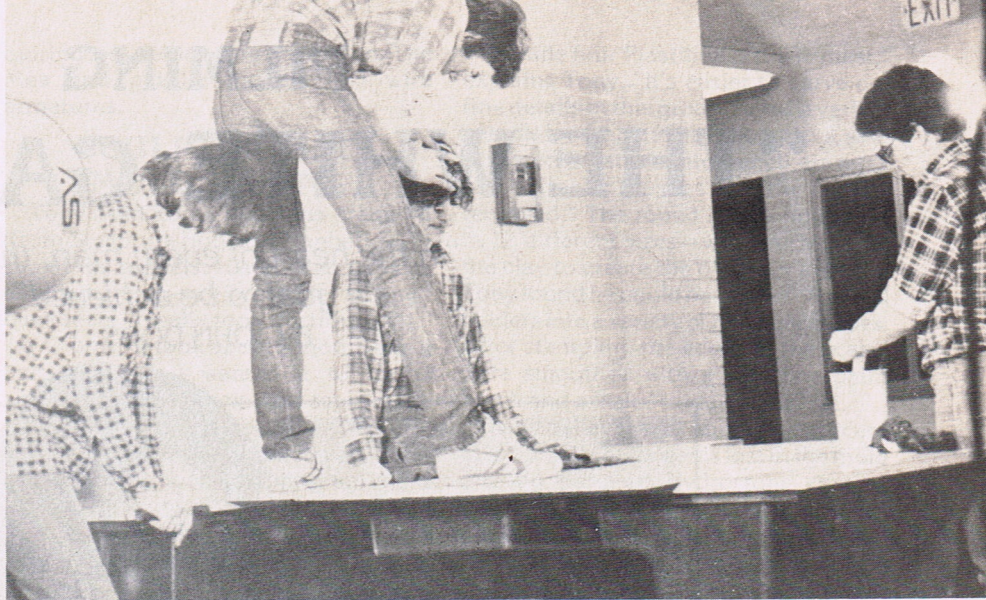
This shot had to be done many times because the pants would fold the wrong way and expose Rich's legs. Because of this, we weren't able to film the whole action because we were wasting time and film.

I then made the directorial decision to cross cut between the action and the eyewitness. The cross cuts allowed us to fold the clothes correctly as Rich shrank into the floor. In the end, this worked out for the better because it not only solved the clothes-folding problem, but allowed us to build suspense with the expressions of the eyewitness.

The final stages of the effect posed the problem of having to simulate the advanced stages of melting skin. We went all out with the gravy. For a dripping effect, cotton was taken and dipped into the gravy, and luckily it pasted itself to Rich's face. To further add to the dripping effect, a plastic tube was put on top of Rich's head and from the other end of the tube, out of the camera's range, someone pumped the gravy using a bicycle pump. Using these readily available devices, the melting man illusion was accomplished.

The "gravy tube" was effective, but it also posed new problems. Hiding the tube in Rich's hair was the most frustrating. Starting from the pump, the tube was run under the tables, up between Rich's back and shirt, over his head, and hidden in his hair. Trying to hide the tube in his hair didn't work because every time Rich moved his head, the tube would pop out of place.

The first solution was to attach the hair



A behind-the-scenes look at the false floor that was constructed for North Hills High School's production, *A Witch in Time*. The floor was mounted on tables so actor Richard Huebner could slide beneath it.



All that's left of the "melting man" are his clothes and the top of his head. He's under the false floor.

to the tube using paperclips. Using the paperclips posed the problem of not being able to hide them sufficiently. Film teacher Ralph Langer found an old wig that was close to the color of Rich's hair. Little clumps were cut off, dipped in the gravy and pasted over the tube and paperclips.

One final complication came when the tube slid from side to side, throwing everything out of place. To keep this from happening, we put a rubber band around his head. With Rich leaving his clothes on top of the tables, and keeping his face behind the clothes, exposing only the top of his head, the melting sequence was concluded.

The script then called for the eyewitness to walk up to the skull and kick it over so that it was facing up. For added impact, an extreme close-up of the

eyes opening showed that Rich was still alive. For this final shot, we used a plastic skull, glass eyes, and the wig that was used earlier. To make the eyes appear to open, a Bauer Royal 10E movie camera was placed approximately one foot from the skull and set at wide angle. It was next set for reverse filming. This gave us five seconds to film the shot. While filming, the gravy was poured from the forehead over the eyes. When viewed in reverse, it looked like the eyes were opening.

Much time and effort were put into the "melting man" scene. However, we all feel that it was worthwhile because *A Witch in Time* has a chance to win an award in an amateur film contest. But most importantly, our perseverance was rewarded with the answer to "how in the world to you make someone appear to melt?"

CM

FILMING “THE WHITE GAZELLE”

“In the heart of every man, there
is a goal to be achieved”

By JOHN DODS

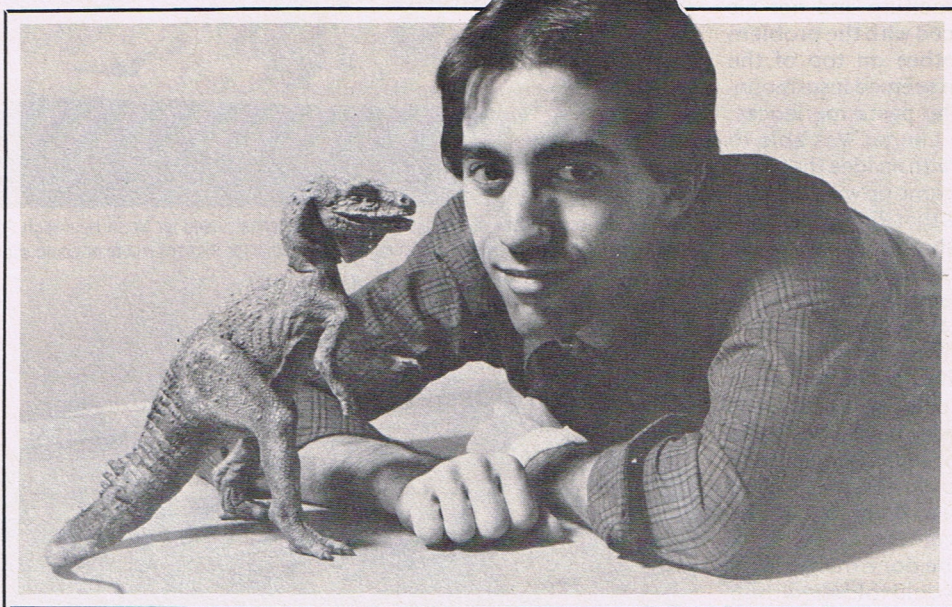


PHOTO: JOHN DODS

Animator Tony Laudati with his stop-motion allosaurus model.

Twenty-five-year-old filmmaker Tony Laudati has written, produced, and directed a sophisticated and beautiful short film of technical complexity and poetic expressiveness. For 15 minutes there is no live action on the screen, but the characters seem to be alive. They speak a language we can't understand, but we know exactly what they're saying. Using the techniques of stop-motion animation, rear-projection, and a variation of Ray Harryhausen's famous Dynamation process, Tony has created a realistic-looking prehistoric world filled with strange creatures and a man with a single minded purpose—its a story with a personal meaning for its creator.

The White Gazelle is the story of a Neanderthal man named Tao, who discovers a beautiful white gazelle living in the forest where he hunts. He is entranced by this almost magical creature and his single driving ambition becomes the capture of the animal. He *must* possess it and soon nothing else matters; he becomes obsessed.

Every day Tao goes hunting for the white gazelle, ignoring the animals he would normally pursue. His mate Mea does not understand Tao's behavior and is angry when the hunter brings only berries home for dinner. They quarrel and Tao leaves to sleep elsewhere that night.

The next morning, Tao returns home to discover strange footprints and the blood of his mate lining their bed of furs. Mea has been killed in the night by a huge animal. Tao runs into the forest where he discovers Mea's remains.

A new passion takes hold of Tao. Going deeper into the forest, Tao comes on another carcass: the body of the white gazelle. More strange footprints surround it. Tao abruptly meets the killer as an allosaurus leaps into the scene snapping, hissing, and attacking the astonished Neanderthal. They fight. Tao first uses his club and then wrestles with the larger creature. The allosaurus attacks Tao—biting his side. Somehow Tao struggles free to grab a pointed stick and spears the dinosaur. The monster shrieks in pain and tries to claw away the spear. Tao uses this moment to grab the severed head of the white gazelle. Its long, hard pointed horns make it a terrible weapon. The wounded Tao waits as the allosaurus attacks again in a fury. With a sudden thrust Tao stabs the creature. It screeches, gasps, staggers, bleeds, falls, and dies—impaled on the head of the beautiful white gazelle.

Tao struggles to his feet. He throws back his head and calls out his name. This is his cry of triumph. “Tao!” It echoes deep into the forest and travels far out over the prehistoric landscape.

ANTHONY LAUDATI

“*The White Gazelle* is a film about goals—which are a very important part of my life”, says Anthony Laudati. “There’s a goal that I wish to achieve and that goal can be all-consuming. I want to be a filmmaker. Most of the time it’s the only thing that matters.”

“Tao is a dreamer—he wants to achieve more than just survival. Some people can be happily married with a nine-to-five job, raise children, and die and some people can live that way. But other people want more than that—they want to see themselves achieving great deeds.”

Tony was born in 1959 “One year after *The 7th Voyage of Sinbad*” as he puts it, in Brooklyn, New York. While growing up on a ranch in upstate New York he and his brothers had a workshop where they could build things. Tony remembers, “I started making movies when I was 12 years old. My brothers and I learned about stop-motion through magazines like *Famous Monsters of Filmland*. We watched *King Kong* religiously whenever it was on TV. We experimented until we figured out how to make stop-motion models.”

Together with his brothers, Tony filmed stop-motion fantasies like *The Magic of Christmas* about toys that come to life to dance under a Christmas tree. When

the toys are terrorized by a toy dragon, marching toy soldiers save the day.

"Early in high school I knew that filmmaking was what I wanted to do. I went to SUNY Purchase College in New York to study filmmaking and I ultimately conceived and shot *The White Gazelle* while there.

"I worked on *The White Gazelle* for two and a half years. The animation took place over a one and a half year period. During the summer recess—in order to save money—I lived in the school studio. The faculty was kind enough to let me have a small room to set up shop, build my models, and shoot. For three months one summer I *lived* in that studio—sleeping on a bed roll surrounded by plaster and clay. I had to duck security guards all the time because I really wasn't supposed to be living there. But I really wanted to do this project—to do something that demonstrated my abilities as a filmmaker. So for two and a half years I spent all of my time sculpting, animating, and working part-time jobs to support myself."

SHOOTING "THE WHITE GAZELLE"

The White Gazelle was shot in 16mm on 7247 color negative film (ASA 100) using a Mitchell and two spring-wound Bolex cameras. For non-matte shots, Tony took incident readings with a Seconic light meter (a Pentax spot meter was used for matte shots as described later).

The stop-motion animation in *The White Gazelle* is frequently reminiscent of the work of Ray Harryhausen. The controlled, theatrical, and deliberate silent-movie-style "acting" of Tao is only possible through the use of a carefully-constructed, jointed armature. Animation done with models with wire armatures do not have this look.

Tony laboriously built all-steel armatures for Tao and the allosaurus model using a drill press, a hack saw, a file, a grinding wheel, and an acetylene torch. The ball bearings were brazed to the ends of steel rods using bronze brazing rod and flux. This technique is similar to soldering but results in a stronger bond.

"I didn't bother drilling holes in the steel balls," explains Tony. "I applied some bronze brazing material to the end of a steel rod. I heated a ball till it glowed red and then touched the rod to the ball, let the bronze on the rod drip onto the ball as they both were heated." Tony dunked the joined materials into cold water to cool the parts.

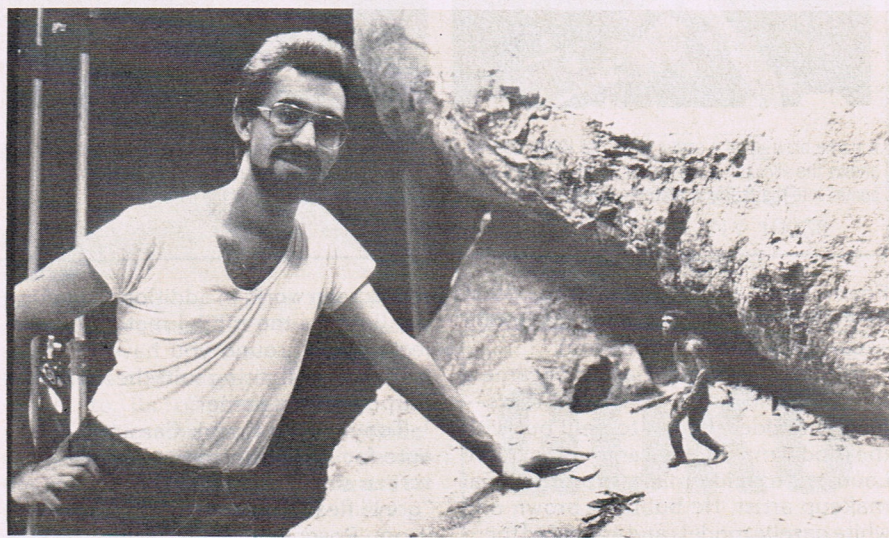
Even the best armatures break. When this happened, Tony had to remove the affected joint from the model, trying to do as little damage to the model as possible. He then had to repair the broken part and replace it—patching the rubber very carefully.

Copper wire was used on models re-

quiring less demanding animation. The Mea and gazelle models had wire armatures.

SCULPTING AND MOLD MAKING

Tony used Roma Plastilina grade #4 (from Sculpture House in Manhattan) to sculpt his models. His allosaurus is as detailed a stop-motion model as any I have seen. "I really took my time on it," says Tony. "It took about a month and a half to build. I wanted it to be as anatomically convincing as I could make it. I went to the Museum of Natural History to study the skeletons and I got hold of every book on dinosaurs that I could find." Tony also found the study of horse, lion, and dog anatomy valuable in determining muscle placement. Through a series of sketches, he worked out his design problems on paper before starting the sculpture.



Tony Laudati with his miniature cave set during the shooting of *The White Gazelle*. The stop-motion Tao model is at right.



The Laudati brothers with Ray Harryhausen. From left to right: Joe, Mike, Harryhausen and Tony.

"Grade four Plastilina is the firmest," explains Tony. "It's easier to carve out fine details in this grade. I used a variety of tools for the detailing: toothpicks, sewing needles (stuck into pencil erasers), and old paint brushes with the bristles removed." The round bristle holders—in 12 different sizes—were pushed into the clay to create the dinosaur's scales. Tony found he could bend the soft metal holders into a variety of irregular shapes. After stamping, the edges of the scales were smoothed with a very fine paint brush and a little "three-in-one" oil.

Tony believes that about five percent of the detail sharpness is lost in the mold making process. Hydrostone casting material was used to mold the sculptures. Tony's casting procedure is explained in step-by-step detail in the book "Stop-Motion Animation" (available through Don Dohler, 12 Morey Ct., Baltimore, MD). The models were made of R&D



A frame blow-up of a scene from *The White Gazelle* shows the allosaurus rearing its head as Tao's spear comes into the frame to stab the monster in the neck.



The battle between man and prehistoric monster rages on and the allosaurus knocks Tao on the ground and bites him in the side.

Foam Latex (R&D Latex Corp. 5901 Telegraph Rd, Los Angeles, CA 90002—currently \$33.00 per gallon).

Filming *The White Gazelle* became a family affair when Tony's brothers—Mike and Joe—began to help out with the model making and animation. Mike Laudati is a taxidermist and professional makeup artist. He built the brown and white gazelle models and animated them in most of their scenes. Joe Laudati, who Tony calls "the dinosaur expert" animated most of the dinosaur's closeups.

DYNAMATION

In *The White Gazelle*, stop-motion models appear in and walk through a variety of settings that look very real. They *are* real. Using a variation on Ray Harryhausen's dynamation process, Tony used 35mm rear projections of forest settings, mattes, and counter-mattes to put his characters *into* the scenery.

"With split-screen rear projection" explains Tony, "your model isn't just in *front* of an image—it's *within* an image." The many different locations called for by the story made it difficult to build everything in miniature. "Initially, I was hesitant to use rear projection" says Tony, "because I was skeptical about the quality I'd be able to get with an ordinary slide projector, but when my first tests were favorable I went ahead with it. There are about 15 split-screen matte shots in *The White Gazelle*; the other shots are miniature sets or simple rear projections. Lighting is the most time consuming part of doing

rear screen work. In addition to making the light on the model match the projected background you have to make sure that the lighting suits the mood and purpose of the scene."

Tony used a Kodak Carousel 35mm auto-focus slide projector for his rear screen shots, projecting onto a Roscoe "grey" flexible rear projection material (from Roscoe in Portchester, NY). A three-foot by four-foot screen cost \$15.00. Tony found that the hot spot on this material was minimal, there being only a ¼ stop difference between the edge and center of an image projected onto the screen. He found that the use of a longer projection lens (he used a four-to-six-inch zoom) produced less of a hot spot than did a wide angle lens.

Tony shot his backgrounds on slow speed (ASA 64) Ektachrome, always using the sidelighting (morning or evening) normally needed in rear screen work. Light coming from the front would be difficult to match on a foreground miniature because such lighting would hit the rear screen image and wash it out.

Tony found it useful to shoot the background plates on slightly overcast days in order to keep the backgrounds moderate in contrast. This was desirable since the plates would pick up contrast when they were rephotographed. Tony found that backgrounds projected for long periods of time began to fade and lighten noticeably. In the future he plans to shoot multiples of needed background plates so that fading transparencies can be replaced before the bleaching

becomes evident.

"The height of the camera is also very important when the backgrounds are being shot," adds the filmmaker. "It's always a good idea to storyboard your film before shooting the background plates so you have an idea of what height the camera is to be in relation to the subject. Whether you want the camera to be below, at, or above the eye level of the animation model will affect the height of the camera when the background is shot."

The matte technique that Tony used to put his models into rear projection plates parallels Harryhausen's Dynamation except that Tony used individual still projections rather than a series of frames of motion picture footage. The process is basically simple and anyone having a movie camera with good registration and backwind capability, a rear projection screen and a slide projector can duplicate this technique. Registration is important because the film must be run through the camera twice as different sections of the shot are alternately exposed and matted out.

In a Dynamation shot, the first run of the film through the camera records the model animation which is set up in front of rear projection screen. However, the lower section of the set is matted out—obscured by black tape, paint, cloth, or paper that is fixed onto a sheet of glass positioned between the camera and the model/projection. The purpose of this first matte is to cover up the animation table to which the model is fixed and to leave an unexposed area of film that will later be filled in. The exact placement of the matte is determined by careful study of the background plate. It might be an intricate line—complex and weaving—or just a simple and straight line, depending on the geography of the scenery. If dynamation is anticipated, then the filmmaker should only photograph background plates having a foreground area that is fairly clean and separate from the background with few or no overlapping elements. Tony is usually able to position the glass close enough to the camera so that he can paint or tape the first matte while looking through the camera viewfinder. This is the easiest method. The idea is to position the matte so that it will appear that the model is *behind* certain elements in the projected landscape.

After the matte is in place, the animation is recorded and the first run through the camera is complete. At this point the model and animation table are removed from the setup and taken entirely out of camera range. Then the "counter matte" is put into place. The counter matte covers everything that was recorded on the first run through the camera. When the counter matte is in place, the first matte is removed, the film is wound back to the beginning of the take, and then run through the camera again, this time ex-



Laudati used a variation of Ray Harryhausen's Dynamation process for some of the shots in *The White Gazelle*. The above photo is a background plate that Laudati shot in some nearby woods. He then rear projected the 35mm transparency and mated in the model dinosaur using in-camera mattes.



The foreground hold-out matte for a shot in *The White Gazelle*. Both the stop-motion model and the background are recorded simultaneously while the foreground is masked out. The film is then backwound and the foreground is recorded on a second pass through the camera.



The background hold-out matte is in place for the second pass, which records only the foreground.



The completed in-camera matte shot. This shot was a reject because the matte cut off the model's feet.

posing only the lower foreground area of the rear projection—the part previously covered by matte number one.

LIGHTING

Tony used Mole-Richardson "Teenie Moles" to light his miniatures. He likes their small size and moderate heat. It took the better part of a day—five to six hours—to set up a typical matte shot. The exact time required for a set-up depended on the complexity of the light and the matte line.

Tony used a Pentax spot meter for taking exposure readings of rear screen setups. "I compare the highlight and shadow area readings of the rear projection and foreground models", explains Tony. "I adjust the light on the model until it is the same intensity as that on the slide.

A DIFFICULT SHOT

Tony recalls one particularly complex matte shot. The action has Tao approaching a tall rock wall; he is walking forward from a distance. Tao reaches the edge of the wall, pauses, and leaps off the wall passing in front on the rock/projection he had appeared to be behind. All of the scenery was projected without any miniature elements. "That shot was done," Tony explains "by filming the caveman's move twice. I had an elaborate aerial-brace system set up which was carefully calibrated in millimeters. After shooting the action the first time I reposi-

tioned the matte and returned the Tao model to its original position and repeated the same move with the model in the same exact positions as it was on the first run through the camera. Tao jumps right through the matte line!

ANIMATION

"The animation that I found most difficult" says Tony, "was the subtle and unobtrusive movement. The fight scene with the Allosaurus was a piece of cake! It was broad and it was fun!

"In the beginning, I used a surface gauge for everything, but I found that to be too time consuming. When you're walking a model—moving it forward—gauge use is most necessary to keep the head and body in line with the forward movement."

Tony prefers not to "double-frame", or expose two frames of film per movement of an animation model. He used that method only once while filming *The White Gazelle*: when the movement had to be very slow and he was physically unable to move the model any more minutely.

The animator remembers another difficult shot: "It wasn't a matte shot but it was very hard in terms of the animation. Tao was walking slowly across a mountain camp. It's a very long shot. I wanted the movement to be smooth and lifelike. I was shooting on a very thick set so I had to pass two-and-one-half foot long tie

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A close-up of the model's head shows the great detailing on Laudati's stop-motion allosaurus.

downs through the set in order to secure the model." He used threaded steel rods for tie downs. Using a pointed steel shaft, Tony drilled the long holes necessary to accommodate the threaded rods. Since Tony was animating without an assistant, he had to constantly crawl under the set in order to change the positions of the tie downs.

POST PRODUCTION

Joe Laudati used a variety of animal sounds—pumas, bears, and tigers—slowed down and played backwards to create the dinosaur's rumblings. Human vocal sounds were mixed in as well. Tony did Tao's voice himself while an actress—Tracy Royce—was brought in to do Mea. The Neanderthals speak in a crude form of verbal speech. The cave people's utterings were slowed down for use in the film.

An original musical score was composed and conducted by Steven Bramson. Bramson used a 12-piece orchestra to create a lovely poetic accompaniment to

the visuals of *The White Gazelle*. The score was recorded at the Eastman School of Music in Rochester, New York.

The negative was cut by the filmmaker himself. "Something I hope never to do again! But when you have to save money you have to take the tiger by the tail," Tony explains. It took him about three months to cut the 15-minute film, during whatever spare time he could find while working a full time job to support himself.

The lab that processed *The White Gazelle* was Du Art in New York City and Tony was generally satisfied with the service and especially liked their student discounts.

The film's seven sound tracks were mixed at Trans Audio in New York City. Tony calls it "A very fine sound studio with excellent facilities and technicians." The same man who mixed Woody Allen's *Zelig* also mixed *The White Gazelle*. It took about two and a half hours to mix the film.

When the sound mix was completed

there was no money left to have 16mm prints made. The production had cost about \$3,000.00. Tony took his 16mm mag track and the silent answer print to Windsor Total Video in Manhattan and had a 3/4-inch video sound tape made for a modest \$100.00. Other places wanted up to \$250.00 for the same job.

CHASING THE WHITE GAZELLE

Today Tony is seeking distribution for *The White Gazelle* and doing free-lance model making and animation effects for film companies like Charlex Inc. and Wizardworks while forming plans for a theatrical film project involving animation effects. He wants to get his career going as a film director.

"Sitting around waiting for the phone to ring or wishing for someone to give you a break is sort of like wishing to win the lottery" believes Tony. "I feel that the better approach is to try and make your own break and show people your work. It's important to drop old resumes, have a good demo reel, and try to get people interested in your work rather than waiting for a mentor to discover you and lead you on the road to fame and fortune.

"At the beginning of *The White Gazelle* there is a quote: 'In the heart of every man, there is a goal to be achieved.' I believe in that goal. I believe that everyone should fulfill that goal—but a lot of people give up on their goal. I think that a goal to be achieved—something to strive for—is really what makes life worth living."

With a slick and professional film to show as well as talent, determination, and sureness of purpose, Anthony Laudati is pursuing his goal. What that goal is has become clear: as Tony says, "Filmmaking is my White Gazelle." **CM**

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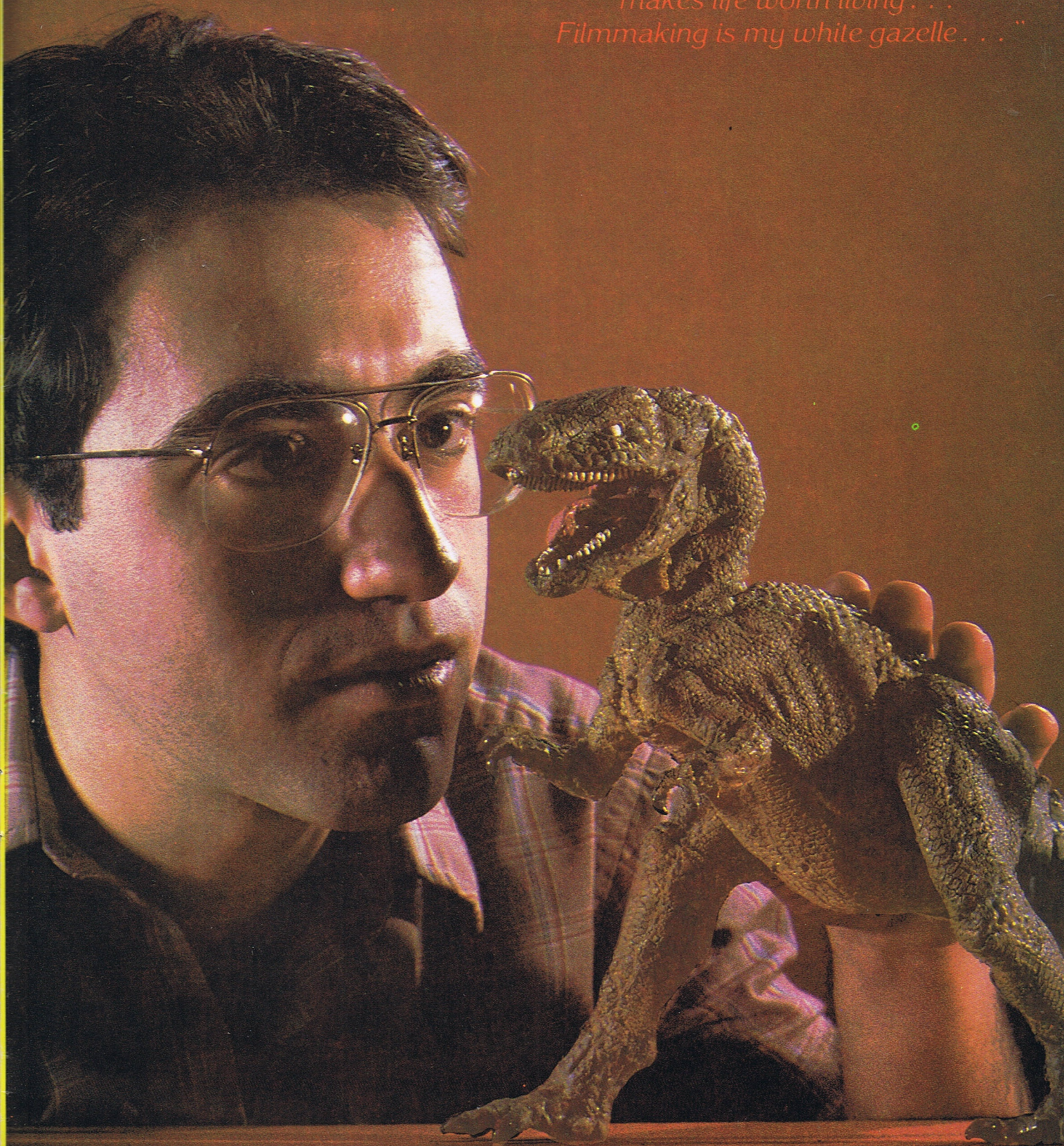
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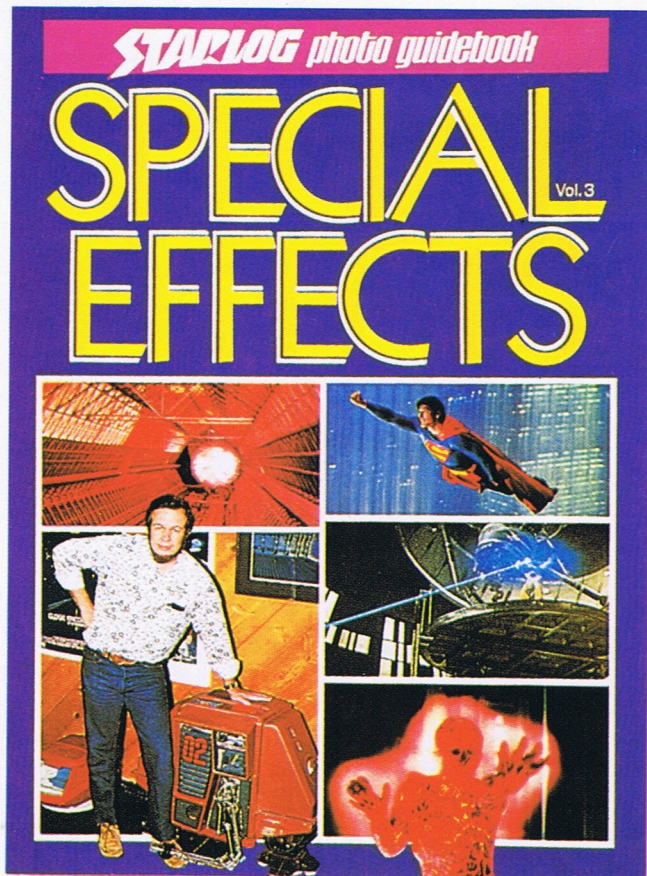
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Tony Laudati poses with his allosaurus model.

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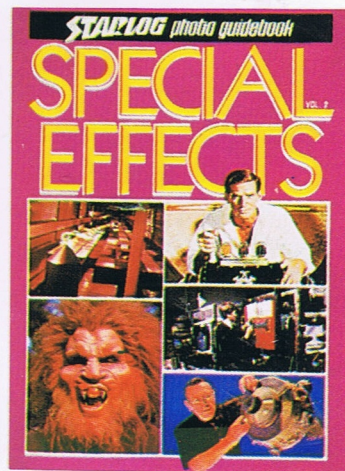
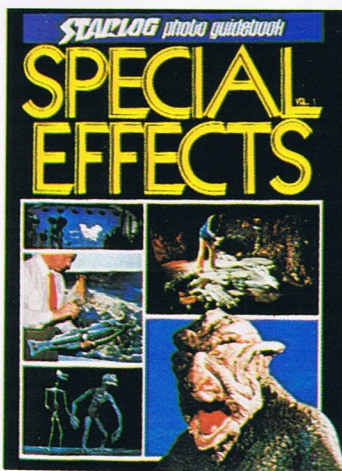
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